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ABSTRACT

The study investigated the effectiveness of the Partner Project, a participation strategy on the participation of learning disabled high school students and their parents during the annual individualized education program (IEP) conference. Eleven students and their parents received the IEP participation strategy training which focused on communication skills and consisted of three student training sessions, a partner (parent and student) training session, and a review session. A contrast training group received a single-session IEP orientation lecture and discussion, while a control group received only the review session held just prior to the IEP conference. Measures used to determine strategy effectiveness were the number of goals identified, verbal contributions made by students and parents during the conference, evaluations of student and parent participation, and conference length. Overall results indicated that the participation strategy training was more effective than either the IEP orientation session or no training in facilitating the ability of students and parents to generate student goals at the IEP conference. However, verbal contributions during the conference did not demonstrate many differences between groups. Implications for curriculum adaptations, format of the IEP conference, and policies related to Public Law 94-142, the Education for All Handicapped Children Act, are discussed. References and sample letters and forms are appended. (JW)

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PARTNER PROJECT FINAL REPORT

A Strategy for Facilitating Student and Parent Participation in the IEP Process

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EXECUTIVE SUMMARY

PARTNER PROJECT: A Strategy for Facilitating Student and Parent Participation in the IEP Process (G008400643) was funded by the U.S. Department of Education, Office of Special Education and Rehabilitative Services to study the effectiveness of an IEP participation strategy on learning disabled high school students and their parents' participation during the annual Individual Education Planning conference.

The premise for developing and testing the effectiveness of such a self-advocacy strategy was based on the policies set forth in the rules and regulations for PL 94-142. These rules and regulations state, "The IEP meeting serves as a communication vehicle between parents and school personnel, and enables them as equal participants to jointly decide what the child's needs are, what services will be provided to meet those needs, and what the anticipated outcomes will be" (Federal Register, 1981, p. 5462). The rules and regulations also discuss the anticipated role for students. "Generally, a handicapped child should attend the IEP meeting whenever the parent decides that it is appropriate for the child to do so" (Federal Register, 1981, p. 5467).

To date, few validated models exist that provide a means for both parent and students to become actively involved in the IEP process. Although strategies for facilitating parent involvement have received some attention (Cone, DeLawyer, & Wolfe, 1985; Goldstein & Turnbull, 1982), focus on student involvement in the IEP process is limited (Gillespie & Turnbull, 1983; Van Reusen, 1985). This is despite the evidence that parents oftentimes play a relatively passive role in the IEP decision-making process during the conference (Goldstein, Strickland, Turnbull, & Curry, 1980; Vaughn, Bos, Harrell, & Lasky, 1986) and that many handicapped students, including secondary level students, and their parents are not aware of the provision regarding student participation in the conference (Gillespie, 1981).

Methodology

Based on these identified needs and premises, an IEP participation strategy was adapted from one developed by Van Reusen (1983) for the purpose of investigating the effectiveness of this strategy on the participation of learning disabled adolescents and their parents during the IEP conference.

The study utilized a randomized group design in which subjects were assigned to one of three intervention groups. Students were selected from the two high schools in a medium-sized metropolitan school district. To be included in the study students must have been identified by the school district as learning disabled and must have been in special education for at least one year.

Students were assigned to one of three intervention groups. One group (treatment) consisted of 11 students and their parents who received the IEP participation strategy training. Another group (contrast) consisted of 10

students and their parents who received a discussion/lecture on the purpose and procedures of an IEP conference. The remaining group (control) consisted of 11 students and their parents who received general information about the nature of the conference just prior to the start of the conference.

The IEP participation strategy training was adapted from a student self-advocacy strategy (IPARS) developed by Van Reusen (1983). This strategy is one of the motivation strategies within the curriculum component of the Strategies Intervention Model (Schumaker, Deshler, Alley, & Warner, 1983). Motivation strategies represent processes which learners can acquire and use to increase their interest and efforts in learning and to gain greater control over their own learning progress. The strategy consists of five steps or sets of behaviors that students and their parents can use to get ready for the conference and can use during the conference. The first step "Inventory (I)" focuses on having students and their parents prepare for the conference by inventorying the students' learning strengths, weaknesses to improve, goals and interests, and choices for classroom learning. From this process students and parents generate Inventory Sheets which list the important information they wanted to share at the conference. The remaining steps (PARS) focus on effective communication skills that can be used during an educational planning conference. The "Provide (P)" step reminds the participants to provide the inventoried information using such communication skills as a pleasant tone of voice, eye contact, and agreement and disagreement statements. The "Ask (A)" step gives ideas for how to effectively ask questions, while the "Respond (R)" step focuses on how to respond to questions. The final step "Summarize (S)," cues the participant to summarize the decisions made and the goals upon which the student will be working.

The stucture and format for the treatment intervention involved the following sessions: three student training sessions, a partner (parent and student) training session, and a review session. Students were first trained in the strategy during the three student training sessions held for one class period on three consecutive days. During these sessions students inventoried their learning strengths, weaknesses, goals, interests, and choices for classroom learning. They also learned the steps regarding how to communicate this information during the conference. They practiced and received feedback during simulated conference activities. During the partner session students and their parents met together with the parents gaining an overall awareness of the IPARS strategy and the students reviewing the strategy. During this session students and parents "negotiated the partnership" by determining which goals were held in common and which goals were unique to the student or the parent. The review session was held 10 minutes prior to the conference with the students and parents reviewing the strategy and their Inventory Sheets.

In comparison, the contrast training consisted of the parents and students meeting together for one session at which time they received an IEP orientation lecture and discussion. After the lecture/discussion, they were asked to complete an Inventory Sheet. Just prior to the conference a review session was held where students and parents had the opportunity to review their Inventory Sheets and to ask any additional questions concerning the conference.

The control group only received the review session held just prior to the conference. The conference was briefy explained to the students and their parents, and they were asked to complete Inventory Sheets.

After intervention, all students and their parents participated in an IEP conference. During the conference the school staff conducted the conference in the usual manner except the conference leader asked the students and their parents a prescribed set of probe questions. The entire conference was audiotaped and the audiotapes were transcribed.

The measures used to determine the effectiveness of the IEP participation strategy were the number of goals identified on the Summary Sheets, the student and parent verbal contributions made during the conference, evaluations of student and parent participation, and conference length.

A method for scoring verbal contributions was developed by the project staff. This system is based on referential communication. It allowed the staff to score the data for type of information contributed using the following informational catgories:

1. identifies learning strengths,
2. identifies learning weaknesses,
3. identifies goals to improve or learn now,
4. identifies choices for learning,
5. identifies future goals or careers,
6. clarifies test performance,
7. statements/questions about the IEP,
8. statements/questions about school, and
9. other.

It also utilized an interval scale for scoring specificity in relation to the referent:

2 = contribution contains specific information
1 = contribution contains general information
0 = contribution contains inappropriate information

Using this system both the type of information contributed and the specificity of the information could be taken into account.

In addition to these dependent variables, several control variables were measured and analyzed. These were added because perusal of the data indicated that these factors might be biasing the data. They included verbal IQ, the number of teacher prompts given to the students during probe questioning, and the elapsed time between the end of training and the IEP conference. The results of the one-way analyses of variance (ANOVA) and post hoc comparisons conducted for the control variables indicated the control group had significantly higher verbal IQ's than the treatment group; the teachers prompted the control students significantly more times than the treatment students; and when the elapsed time for the contrast and treatment groups were compared, the elapsed time was significantly greater for the treatment group. The elapsed time could not be incorporated into

the major statistical analyses because it applied only to two groups. However, both student verbal IQ's and teacher prompts to students were incorporated into the appropriate major analyses as covariates.

Results

Overall the results of this research indicated the IPARS self-advocacy training was more effective then either an IEP orientation or no training in facilitating LD students and their parents' ability to identify student goals. Students and parents in the treatment group identified an average of five goals whereas students and parents in the contrast group identified three and two goals, respectively. Students and parents in the control group identified an average of less than one goal. During the time in which teachers asked the probe questions at the IEP conference, students who had received the IEP strategy training were more successful than the students who had received the IEP orientation in contributing information about learning strengths and weaknesses to improve. While students in the treatment group had an average learning strengths score of 11.5 and an average learning weaknesses score of 8.7, students in the contrast group had average scores of 3.8 and 3.7, respectively. The same trend was also evident for the students' contributions concerning future goals or careers. Significant differences were not found for any of the other informational categories. In these analyses both verbal IQ and number of teacher prompts served as covariates. No differences were evident among the groups when the students were not being asked the probe questions. Results for the parents indicated there were no significant differences for the parents on the amount of verbal contributions made either during probe questioning or during the rest of the conference. Evaluation of students' performance during the IEP conference by the students, the parents, and other participants indicated there were not perceived differences among the three training groups. The same finding was evident for parents when they completed a self-evaluation. Finally, average conference length for the three groups was relatively equal with the means by group ranging from 23.6 minutes to 26.9 minutes.

Discussion

The results of this study indicated that when high school learning disabled students and their parents were given a strategy for systematically inventorying the students' learning strengths, weaknesses, goals and interests, and choices for learning, they are able to generate more goals to share at the IEP conference than if not given the strategy. It appears that this strategy did provide students and their parents with a means of identifying goals that they could share at the conference. Based on feedback from the parents during the study and during a pilot study in which the parents were trained as in-depth as the students, the Inventory step seems particularly important for the students. Feedback indicated that parents did not perceive the need for such in-depth training on their part but did perceive it as quite important for their sons or daughters. This may be related to the fact that many of the parents participating in the strategy training had been participating in IEP conferences for six to seven years and felt comfortable with the process, while for most of the students this was their first or second conference. Strategy training may be more salient for parents earlier in the students' special education.

Generalization of the strategy was measured at the IEP conference with the major dependent variables being student and parent verbal contributions made during the conferences. Results do not indicate strong positive support for the strategy but they are promising. Strategy trained students did identify more learning strengths and weaknesses and to some extent more future goals and career interests during probe questioning than students who received only an IEP orientation.

These promising but not conclusive results may be somewhat related to extenuating factors. First, the elapsed time between the training and the IEP conference was not well controlled. While students and parents in the strategy group averaged 60 days between the end of training and the conference, students and parents in the orientation group averaged 24 days. A training factor may also have weakened the power of the strategy. In this study students were training in groups of three to six students with their parents. Due to the group format, individual mastery of strategy use during a simulated conference was not required. However, in a previous study (Van Reusen, 1985), more striking effects were noted when students were trained individually and individual mastery was required. To test the importance of the individual mastery component for facilitating generalization to the IEP conference, the principal investigators are currently conducting an additional study with groups of junior high LD students in which the group training model has been modified to ensure individual mastery of the strategy behaviors (G#008530213). First year data from this study indicate that the strategy is substantially more powerful when individual mastery is required.

Implications

Clearly this research project does not result in a clear-cut recommendation for using the IPARS strategy with groups of learning disabled high school students and their parents. Although both students and parents were able to generate more goals if they received strategy training, verbal contributions during the IEP conferences did not demonstrate many differences between the variously trained groups. However, other related studies conducted by the reseachers indicate that if individual mastery for strategy use is incorporated into the teaching routine, then students effectively use the strategy during the IEP conferences. The adaptation of the strategy training from an individual to a group format is particularly important for use in the classroom. With its relatively short training time (one class period on four consecutive days) this strategy could be incorporated into the curriculums of school learning disbilities programs.

This research also has implications for the format of the IEP conference. The teachers reported that the probe questions used during the conference facilitated involvement, particularly student involvement. Providing IEP conference leaders with probe questions may assist in making students and parents more equal partners in the IEP process.

Finally, this research has implications for policies related to PL 94-142. Currently the rules and regulations for PL 94-142 specify that students should be given the opportunity to participate during the IEP conference if the parents decide it is appropriate. However, providing an

opportunity for the student and their parents to participate is different than providing the tools they need to be effective participants. This research suggests that providing learning disabled adolescents with a strategy or tool can positively affect their participation and assist them in taking an active role in the IEP process. Whereas providing parents of LD adolescents with such a tool may be too late in the students' special education for parents to profit.

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INTRODUCTION

Involving the learning disabled student and his/her parents in the development of an individual education program or IEP plan is generally thought to be a valuable practice when planning services for the learning disabled. Commitment to this position has been associated with legislative mandates requiring parental involvement and encouraging student involvement. For example, Public Law 94-142 - The Education for All Children Act of 1975 specifically delegated a major decision-making role to parents. Prior to the passage of PL 94-142, parents of handicapped children were typically involved in their child's education programming through behavior or academic reporting conferences, such school related activities as PTA meetings, and perhaps social events which occurred in the classroom or school. Following the passage of PL 94-142, parents' designated responsibilities were modified to include such sophisticated roles as teacher, advisor, and advocate (Cone, DeLawyer, & Wolfe, 1985; Simches, 1975). The Federal Register (1981) describes the extent to which parents should be involved in the IEP meeting.

> The IEP meeting serves as a communication vehicle between parents and school personnel, and enables them as equal participants to jointly decide what the child's needs are, what services will be provided to meet those needs, and what the anticipated outcomes will be. (Federal Register, 1981, p. 5462)

Student involvement was also addressed in PL 94-142, by suggesting that handicapped students, especially those at the secondary level, could participate in the IEP conference whenever appropriate. Policy interpretation guidelines on student IEP participation state:

> "Generally, a handicapped child should attend the IEP meeting whenever the parent decides that it is appropriate for the child to do so. Whenever possible, the agency and parents should discuss the appropriateness of the child's participation before a decision is made, in order to help the parents determine whether or not the child's attendance will be (a) helpful in developing the IEP and/or (b) directly beneficial to the child. The agency must inform the parents about this provision before each IEP meeting -- as part of the 'notice of meeting' required under section 300, 345(c) that they may invite their child to participate.
> NOTE: The parents and agency should encourage older handicapped children (particularly those at the secondary level) to participate in their IEP meetings. Federal Register, 1981, p. 5467.

To date, few validated models exist that provide a means for both the parent(s) and student to become actively involved in the IEP planning process. Although strategies for facilitating parent involvement have received some attention (Cone, DeLawyer, & Wolfe, 1985; Goldstein & Turnbull, 1982), focus on student involvement in the IEP process is limited (Gillespie & Turnbull, 1983; Van Reusen, 1985). Models that build on the interactive nature of the parent/child IEP relationship have not, to our knowledge, been developed and empirically tested. Consequently, parents and their learning disabled children, especially older learning disabled students, may be unaware or at odds with one another regarding the nature and scope of the student's educational needs. This situation may produce an adverse effect on the efforts of school personnel to provide successful individual education programs since understanding, commitment, and motivation, particularly on the part of the student, would seem to be a critical component to the successful completion of IEP goals. To facilitate the IEP process so that both the spirit and letter of the law can be actualized, strategies or models that emphasize a partnership role

between the learning disabled student and his/her parents and school personnel in the development, implementation, and evaluation of the individual education program need to be systematically developed and validated. The purpose of this research project was to investigate the effects of training LD adolescents and their parents in the use of an IEP participation strategy that facilitates working together as partners during the IEP process.

Parent IEP Involvement

Although parent and student involvement in the IEP process has received little attention in the literature, the participation of parents in the IEP process has been well documented. Research evaluating parents' perception and satisfaction with their involvement in their child's education, particularly IEP conferences, has been conducted primarily by sending questionnaires to the parents following these meetings. In evaluating parents' roles in the IEP decision-making process, Lusthaus, Lusthaus, and Gibbs (1981) found parents most often perceived themselves as serving in the role of giving and receiving information. In a recent study Witt, Miller, McIntyre, & Smith (1984) found that parent satisfaction with IEP meetings and annual reviews was most related to: 1) allowing enough time for the meeting, 2) parents not perceiving school personnel as blaming them for their child's problems, and 3) the degree to which several school personnel contributed to the formulation of the child's educational program. In contrast to these variables, parents did not rate their participation as a critical variable. Questionnaires focusing on parent participation during IEP meetings reveal that many parents are not asked to

be involved in writing their child's IEP (Polifka, 1981), parents are frequently not actively involved in the decision-making process of their child's IEP (Gilliam, 1979; Gilliam & Coleman, 1981, NEA, 1978), and parent attendance at IEP meetings may vary depending upon the handicapping condition of the child (Scanlon, Arick, & Phelps, 1981).

Goldstein, Strickland, Turnbull, and Curry (1980) conducted behavioral observations of 14 IEP meetings for students grades two through six to obtain an objective look at what actually occurs during these meetings. Several types of data were collected including the frequency of topics discussed. Of the topics discussed during the meeting, curriculum (goals and objectives), behavior, performance, miscellaneous conference procedures, and evaluation were the most frequently cited. With regards to verbal interactions results indicate that the resource teacher was the most frequent communicator ($\overline{x}$ = 9.6 citations) speaking twice as much as the parent ($\overline{x}$ = 4.6 citations). However, the parent data across the conferences were quite varied with three of the fourteen parents accounting for 63 percent of the total amount of time parents spoke. Data from the four shortest conferences indicated parents talked 0 to 2 times. Despite this relatively low parent participation level parent satisfaction with the meeting and the child's placement was quite positive.

Vaughn, Bos, Harrell, and Lasky (1986) conducted a study in which 26 initial placement/IEP conferences for elementary-age children suspected of learning disabilities were observed. Immediately following the conferences parents were interviewed with regards to their perceptions of their child's learning problems, the school's role in the placement/IEP process, and the

placement/IEP conference itself. Results from the observational portion of this study paralleled the Goldstein et al. study (1980) in that most parents verbally interacted at a relatively low frequency level. With an average conference length of 42 minutes, parents verbally interacted approximately six and a half minutes. Parents averaged asking four and a half questions with five parents asking no questions at all during the conference. This is despite the fact that during this conference the decision was made whether or not to initially place the child in a special education class, an IEP was developed, and the procedures regarding this process and parents' rights were explained.

Results from the structured interview conducted after the conference indicated that most parents (60%) felt positive and appreciative about the meeting. Although parents for the most part did report satisfaction, some parents did express concerns about how they should explain the results and implications of this conference to the child experiencing the learning problems. This seems particularly relevant since 38% of the parents' responses to the question "How do you think your child would describe his/her learning problem?" were categorized as "the child doesn't think there is a problem."

Based on the lack of active involvement of parents in the IEP process, a study was conducted by Goldstein and Turnbull (1982) to evaluate the effectiveness of implementing two strategies to increase the level of parent involvement during the IEP conference. One strategy involved the parents completing a questionnaire concerning their child's goals before the IEP meeting. For the other strategy, a group of parents had a

counselor present during the meeting to serve as a parent advocate. Another group of parents served as a control. Results indicated that parent involvement in the group who received questionnaires did not differ significantly from the control group; however,there was significantly more involvement by those parents who had an advocate present at the meeting.

Although the purpose of PL 94-142 is to have parents fully participate in their child's educational placement and program development, research results suggest that parents are not fully prepared to fulfill this role (e.g., Turnbull & Turnbull, 1982; Goldstein et al., 1980; Vaughn et al., 1986). In addition, there is some research suggesting that professionals are not in favor of having parents directly involved in the educational planning and placement of their child (e.g., Yoshida, Fenton, Kauffman, & Maxwell, 1978).

Another unresolved issue is the extent to which parents want to be involved in their child's educational programming. Questionnaires and interviews reveal the parents seem to be satisified with the decisions reached during the IEP conference (Goldstein et al., 1980; Goldstein & Turnbull, 1982; Vaughn et al., 1985, Witt et al., 1984), and yet what occurs during the conferences seems to vary considerably depending upon the parent (Goldstein et al, 1980; Vaughn et al., 1986). Although individual needs and preferences of parents are considered to be important variables in determining the role parents play (Debinski & Mauser, 1977; McLoughlin, Edge, & Strenecky, 1978), there are little data to suggest that conferences are responsive to the various needs and goals of parents. Frank and Ehly (1983) offer several home or home-school-based objectives and strategies

which can be written into the IEP and monitored jointly by parents and teachers. This form of home-based intervention may promote greater parental involvement in the planning of IEPs. Turnbull and Turnbull (1982) and Vaughn et al. (1986) suggest that it may be necessary to develop various levels of parent involvement which best reflect parents' needs. This assumes that school personnel can identify individual parent needs and respond to them, and by responding to the individual needs of parents, the best educational program for the child will result.

Student IEP Involvement

Although student involvement in IEP planning is not specifically required by Public Law 94-142, regulations specified in the Federal Register (1981) provided the opportunity for school-age handicapped students to participate in the planning process when it is "deemed appropriate". Implementation of this regulatory provision has been difficult for local educational agencies because the criteria for determining student involvement was neither included in the 1981 federal guidelines, nor was the expected level or degree of student participation defined (Turnbull, Strickland, & Brantly, 1982).

Research reports have emerged from the nation's educational research institutions regarding handicapped student placement and instructional planning effectivenss (Fenton, Yoshida, & Kauffman, 1979; Fenton, Yoshida, Maxwell, & Kauffman, 1979; Allen, 1980; Ysseldyke, Algozzine, & Thurlow, 1980). The findings reported on student involvement in IEP planning have been quite discouraging. Ysseldyke and associates (1980) estimate that

student IEP involvement throughout the nation's public school special education system is infrequent at best.

Although the majority of reported investigations have sought to examine the IEP planning and placement process, other investigations have sought to examine the perceptions of handicapped students and their parents concerning student involvement in IEP planning. For example, Gillespie (1981) found over 90% of the 47 secondary level handicapped students in a North Carolina metropolitan school district and over 75% of their parents had no prior knowledge of the student participation provision of PL 94-142.

When asked about their attitude toward student participation, over 90% of the parents and over 75% of the students reported that they either completely agreed or mostly agreed with the idea of student involvement. In addition, over 70% of the students and 90% of their parents reported that they believed it was a good idea for the student to attend their own IEP meeting.

Several educational professionals have suggested criteria that should be considered when determining if a student's participation in the IEP conference would profit a student and his/her educational program. Winslow (1977) suggested that a student's age, severity of handicap, and ability to handle the situation should be areas addressed by criteria related to student participation. More recently Gillespie (1981) and Gillespie and Turnbull (1983) have suggested that a student's interest, communication level, and comfort are important criteria. Specifically they suggest the following considerations be taken into account:

> Communication. Does the student understand conversation conducted in simple language? Can the student communicate preferences and interests either verbally or nonverbally?

> Comfort. If the meeting is conducted in a nonthreatening way, will the student feel reasonably comfortable? If disagreements occur, how will he or she react? Some uncertainty is always present in new situations, but a few students may feel completely uneasy in a formal setting with school officials and parents.
> Interest. Does the student understand what the meeting is about? When the meeting is explained, does the student want to attend? As parents and teachers, do you feel that the student's involvement could be beneficial, either to you and other IEP committee members, or to him or her? (Gillespie & Turnbull, 1983, p. 28).

Although ideas for involving students have been proposed, investigations on the effects of training handicapped students to participate in IEP planning remain relatively scarce. Salend (1983) designed a self-assessment model as a vehicle for involving students in the formulation of their own IEPs. While the validity and generalizability of this model have yet to be established, preliminary results suggest that students can accurately identify their own instructional levels. A recent study by Van Reusen (1985), which examined the effects of training LD adolescents in self-advocacy procedures for use in the IEP conference, found that student verbal contributions toward the development of educational program goals increased dramatically as a result of training. The IEP self-advocacy strategy was designed by the investigator to enable students to: a) inventory their learning needs and interests, b) provide their inventoried information during a conference, c) ask appropriate questions during a conference, d) respond appropriately to questions during a conference, and e) verbally summarize their understanding of the IEP goals before the conclusion of the conference. Using a multiple baseline across individuals and posttest-only control group design, eight of the 16 students were selected to individually receive the strategy training. Data

concerning the type and quantity of verbal contributions made by the 16 subjects revealed that both groups were capable of contributing information to the IEP conference, but the performance of the trained subjects was substantially improved as a result of strategy training. The data further revealed that the IEP documents written for the eight treatment subjects reflected more goal statements made by the students than the documents written for the control subjects. The overall results of the study supported the hypothesis that LD adolescents can contribute important and relevant information to the IEP planning process.

Certainly not all handicapped students have the capacity to participate in the IEP process. The handicapped student's ability to communicate becomes an important factor for parents and service providers to consider when the appropriateness of student involvement in education or treatment decisions is being debated. Still, many students, due the nature of their exceptionality, age, and interest may have the capacity to actively participate in IEP planning if properly trained to do so.

Student and Parent IEP Involvement

Since the passage of PL 94-142, suggestions and strategies for involving parents in the IEP conference have been discussed with limited, but positive research support (Cone, DeLawyer, Wolfe, 1985; Goldstein & Turnbull, 1982; McKinney & Hocutt, 1981; Yoshida & Gottlieb, 1977). Recently, the concept of involving the secondary level student in the IEP process, particularly with a self-advocacy viewpoint, has received attention in the literature (e.g., Gillespie & Turnbull, 1983; Van Reusen, 1985). Training has been shown to be effective with both students and

parents in increasing respective involvement in the IEP process. If parents and students can be separately taught to become more actively involved in the IEP conference, could secondary level students and their parents be taught simultaneously the necessary skills to participate as partners in the IEP process? This is the hypothesis that led the investigators to develop and conduct a study to determine the effectiveness of training learning disabled high school students and their parents in an IEP participation strategy.

Purpose of Study

The purpose of this study was to investigate the effectiveness of a self-advocacy strategy on the participation of learning disabled adolescents and their parents during the IEP conference. The effectiveness was measured by comparing the number of goals identified on the Summary Sheets for three differently trained groups of students and their parents: treatment, contrast, and control groups. Strategy effectiveness was also measured by the verbal contributions made by students and parents during the IEP conference and by participation evaluation scales completed by the students, parents, and other conference participants. Specifically, this study addressed the following research questions:

1. Were there significant differences among the three groups on the number of goals identified by students as recorded on the student Summary Sheets?
2. Were there significant differences among the three groups on the number of goals identified by parents as recorded on the parent Summary Sheets?

3. Were there significant differences among the three groups of learning disabled students for the quantity of information contributed in nine informational categories during the time the teacher asked the probe questions when the students' verbal IQ and the number of teacher prompts were taken into account?
4. Were there significant differences among the three groups of learning disabled students for the quantity of information contributed in nine informational categories during the rest of the conference when the students' verbal IQ were taken into account?
5. Were there significant differences among the three groups of parents for the quantity of information contributed in nine informational categories during the time the probe questions were asked?
6. Were there significant differences among the three groups of parents for the quantity of information contributed in nine informational categories during the rest of the conference?
7. Were there significant differences among the three groups on the evaluation of student participation in the IEP conference as measured by the student and the other participants in the conference when verbal IQ is taken into account?
8. Were there significant differences among the three groups on the evaluation of parent participation in the IEP conference as measured by the parents' self-evaluation of their performance?
9. Were there significant differences among the three groups for the length of the conference?

METHODS

This section presents a description of the overall design of the study, setting, subjects, intervention procedures, dependent measurement procedures and instrumentation, and data analysis.

This study investigated the effectiveness of an IEP participation strategy using a randomized group design in which subjects were assigned to one of three intervention groups. Group 1 (treatment) consisted of 11 students and their parents who received the participation strategy training (IPARS) and a discussion/lecture on the purpose and procedures of the IEP conference. Group 2 (contrast) consisted of 10 students and their parents who received a discussion/lecture on the purpose and procedures of an IEP conference. Group 3 (control) consisted of 11 students and their parents who received general information about the nature of the conference just prior to the start of the conference. After intervention, all students and their parents participated in an IEP conference. These dependent measures consisted of student and parent identified goals on the Summary Sheets, the student and parent verbal contributions made during the conference, participation evaluations of student and parent participation, and conference length. Student's verbal IQ and the number of teacher prompts served as covariates when relevant to the research question.

Setting

The study was conducted in the Amphitheater Public School District in the greater Tucson metropolitan area. A culturally diverse district, the Amphitheater School system serves Mexican Americans, Native Americans and recent immigrant families from Southeast Asia. The ethnicity of the

student population consisted of 1.1% Native American, 2.0% Black American, 2.0% Asian American, 13.0% Hispanic, and 82.0% others. The district diversity was also representative across the socioeconomic levels. The district had two 4-year high schools. Both high schools participated in the project. Within each high school a Support Center, staffed by 7-9 special education teachers, provided the services for the learning disabled students who participated in the study as well as other handicapped students. Within the Support Centers each special education student was assigned to one teacher who served as the student's advocate. This teacher assisted the student in course planning and scheduling to ensure that the student had the opportunity to receive enough high school credits to graduate. This teacher also scheduled, planned, and served as the conference leader for the student's IEP conference.

Subjects

Subjects were selected for the study through a volunteer process. The parents of all students who were identified as learning disabled in the two high schools were sent a letter describing the project with an attached permission form they were asked to return (see Appendix A). In addition Partner Project staff attended the fall parent meeting sponsored by the Support Center in each school and described the project and elicited volunteers. Approximately eighteen students and their parents were obtained using this process. Finally, the special education teachers called parents approximately one month prior to the scheduled IEP conference, described the project, and asked if parents and their son or daughter would be interested in participating. A follow-up call was made

by project staff further explaining the project. Using these three means of obtaining subjects, 37 subjects volunteered to participate. The 37 students and their parents were randomly assigned to intervention groups: treatment, contrast, and control. Of the 37 students and their parents who agreed to participate, 34 completed their respective intervention training and attended the IEP conference, resulting in 13 treatment students, 10 contrast students, and 11 control students. Two students were randomly selected and dropped from the treatment group to more nearly equalize subjects in each group.

The student subjects were 21 male and 11 female high school learning disabled students and their parents. There were 14 freshman, 9 sophomores, 8 juniors, and 1 senior ranging in age from 14 to 18 years with a mean age of 16 years, 6 months. Subjects included 1 Black, 1 Arabic, 2 American Indians, 6 Hispanics, and 22 Caucasians. Thirty-eight parents participated in the study, in that they received intervention training and attended the IEP conference. Of the 32 conferences observed for the study 24 had only the mother in attendance, two had only the father in attendance, and six had both parents in attendance.

Students were identified as learning disabled according to school district criteria (see Appendix B). In this district students are identified learning disabled if the student exhibits a significant discrepancy between ability and achievement, when intellectual ability, age and previous educational experience in the regular classroom are considered. In this district a significant discrepancy is defined as functional achievement at or below 50% (.5) of expected achievement. In

addition to this criterion, modifications of existing teaching strategies and curriculum within the regular classroom setting, which have proved to be unsuccessful, must be documented. According to the district criteria, a student is excluded from consideration as learning disabled if the learning problems are primarily due to another handicapping condition(s), from extended absence, from "educational disadvantage", and if discrepancies between ability and school achievement are due to motivation.

Demographic information concerning both students and their parents were collected from the parents and school records. The Biographical Data Form (Appendix C) was completed by the parents or by a project staff member during a phone call with the parent(s). The obtained information provided descriptive characteristics on the participating families. Table 1 presents family characteristics for all subjects totaled and for each intervention group. When one-way analyses of variance were computed on the characteristics having interval data, no significant differences among the three groups were found. The Student Information Form (Appendix C) was filled out by a project staff member during a review of each student's records. The information obtained provided additional descriptive characteristics and was used in part for statistical analyses. According to the demographic information, the subjects had full scale intelligence standard scores that ranged from 71 to 102, and all subjects were currently enrolled in the district's LD program. Table 2 presents student characteristics using the same formation as Table 1. One-way analyses of variance on the interval variables indicated that there were only two variables for which the performance among the three groups was signficantly

Table 1

Means, Standard Deviations, and Ranges for
Family Characteristics

X (SD)	Total	Treatment	Contrast	Control
Parents Marital Status	M = 23 D = 6 S = 3	M = 6 D = 4 S = 1	M = 7 D = 2 S = 1	M = 10 S = 1
Mother at Home	yes = 30 no = 1	yes = 10 no = 1	yes = 9	yes = 11
Father at Home	yes = 25 no = 7	yes = 7 no = 4	yes = 8 no = 2	yes = 10 no = 1
Mother's Income	3.733 (2.828) 1-10	3.500 (1.716) 1-7	5.000 (4.031) 1-10	2.909 (2.300) 1-6
Mother's Education	11.933 (2.363) 7-18	11.000 (2.981) 7-16	11.556 (.727) 10-12	13.091 (2.300) 10-18
Father's Income	8.031 (2.609) 2-12	8.727 (2.270) 3-10	8.100 (2.470) 3-10	7.273 (3.069) 2-12
Father's Education	12.862 (2.386) 6-18	13.000 (1.581) 12-16	12.500 (2.121) 9-16	13.100 (3.281) 6-18
Primary Language - Mother	Eng = 28 Span = 2 Bil = 1	Eng = 9 Span = 2	Eng = 9	Eng = 10 Bil = 1
Primary Lanugage - Father	Eng = 29 Span = 3	Eng = 9 Span = 2	Eng = 10	Eng = 10 Span = 1
# of Siblings	2.031 (1.713) 0-7	1.818 (1.779) 0-6	2.700 (1.889) 0-7	1.636 (1.433) 0-4
# of Siblings in Spec Ed	.938 (1.014) 0-4	1.273 (.786) 0-2	1.100 (1.287) 0-4	.455 (.820) 0-2
Placement of Siblings	no place = 18 LD = 11 blind = 1 resource = 1 N/A = 1	no place = 4 LD = 7	no place = 6 LD = 2 blind = 1 N/A = 1	no place = 8 LD = 2 resource = 1

Table 2

Means, Standard Deviations and Ranges for
Student Characteristics

X (SD) Range	Total n=32	Treatment n=11	Contrast n=10	Control n=11
Age	16.492 (1.06) 14.42- 18.58	16.280 (1.132) 14.83- 18.58	16.558 (.984) 15.25- 18.17	16.644 (1.119) 14.42- 18.58
Grade	9.938 (.914) 9-12	9.636 (.809) 9-11	10.100 (1.01) 9-12	10.091 (.831) 9-11
Sex	M = 19 F = 13	M = 5 F = 6	M = 6 F = 4	M = 8 F = 3
Ethnicity	white = 22 black = 1 hisp = 6 other = 3	white = 6 black = 1 hisp = 4	white = 7 other = 3	white = 9 hisp = 2
Primary Lang of Student	Eng = 31 Span = 1	Eng = 10 Span = 1	Eng = 10	Eng = 11
Years in Adaptive Education	7.133 (2.255) 3-12	6.900 (1.969) 4-10	7.000 (2.944) 3-12	7.500 (1.900) 4-11
Years in L.D.	7.033 (2.512) 1-12	7.200 (2.616) 1-11	6.700 (2.058) 4-10	7.200 (3.011) 3-12
Years in School District	6.219 (3.554) 1-16	7.091 (3.534) 1-12	5.800 (3.120) 2-10	5.727 (4.077) 2-16
Full Scale IQ	87.031 (9.054) 71-102	86.455 (9.267) 72-100	84.300 (8.616) 71-94	90.091 (9.127) 75-102
Verbal IQ	85.719 (9.364) 67-115	81.909 (9.513) 67-100	84.000 (7.469) 72-92	91.091 (8.972) 80-115

Table 2 (continued)

X (SD) Range	Total n=32	Treatment n=11	Contrast n=10	Control n=11
Performance IQ	90.219 (12.561) 61-117	92.818 (10.741) 72-108	87.300 (10.573) 68-101	90.273 (16.038) 61-117
Reading	6.474 (2.600) 2.4-12.9	5.409 (1.988) 2.4-7.9	5.700 (2.227) 3.3-9.3	8.420 (2.633) 5.6-12.9
Math	5.425 (1.514) 2.5-8.9	4.600 (1.229) 2.5-6.8	5.970 (1.771) 3.0-8.9	5.755 (1.267) 4.0-8.1
Written Lanugage	5.121 (1.582) 2.7-9.1	5.067 (1.619) 3.3-8.0	4.938 (2.218) 2.7-9.1	5.300 (1.072) 3.9-7.2

different, verbal IQ (F (2,29) = 3.321, $p < .05$) and reading achievement (F (2,29) = 5.383, $p < .01$). Post hoc comparisons indicated that the control group scored significantly higher than the treatment group on verbal IQ and higher than both the treatment and contrast groups on reading achievement. Since all written material was read to the students, no statistical control for reading achievement was imposed. However, theoretically verbal IQ could be substantially related to student verbal performance during the IEP conference. Therefore, verbal IQ was added to the research design as a covariate. No other significant differences were found among the three groups.

Intervention Procedures

This section describes the intervention procedures including their development and content, structure and format, and staff training for the three intervention conditions--treatment, contrast, and control.

Treatment Intervention

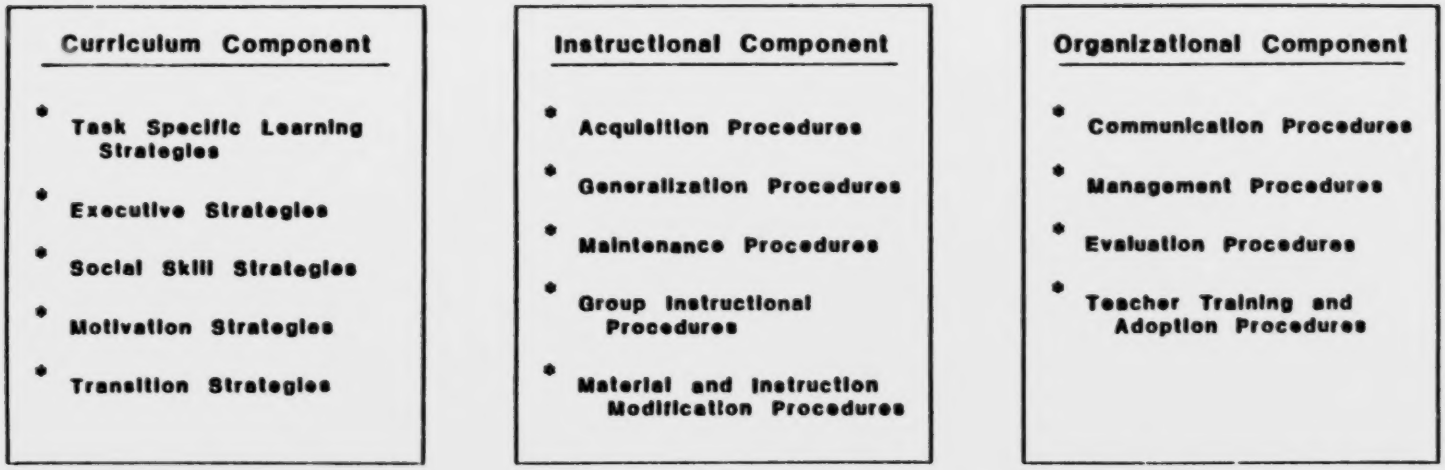
The intervention used with the treatment group (LD adolescents and their parents) focused on teaching participants a 5-step IEP participation strategy (IPARS) developed by Van Reusen (1985) and adapted for this study. The strategy is based on the assumption that learning disabled students at the secondary level have the communication skills and the interest to take an active role in planning their educational programs. However, students along with their parents need to be systematically taught about the purpose and content of an IEP conference and given a strategy to use in preparing for the conference and for effectively communicating their ideas during the conference.

The strategy is related to the Strategies Intervention Model (see Figure 1) developed at Kansas University Institute for Research in Learning Disabilities (Schumaker, Deshler, Alley, & Warner, 1983). It is one of the motivation strategies within the curriculum component of the model. Motivation strategies are techniques and procedures that involve the learner in key aspects of the learning process and are used to increase a student's commitment to learn (Van Reusen, Bos, Deshler, & Schumaker, in press). Motivation strategies represent processes which learners can acquire and use to increase their interest and efforts in learning and to gain greater control over their own learning progress. These strategies focus on assisting students in identifying their learning strengths and weaknesses, prioritizing their needs, choosing and monitoring their goals, and successfully working toward the attainment of those goals.

The parameters for teaching the strategy are based upon the Instructional component of the Strategies Intervention model in that they incorporate the acquisition and generalization techniques developed by Deshler, Alley, Warner, and Schumaker (1981). Drawing from these approaches, the IEP participation strategy used modeling and guided practice to facilitate the acquisition and generalization of the strategy. The IEP participation strategy was also designed to develop appropriate student and parent interactions during the IEP conference. Feedback and verbal reinforcement were used as shaping procedures to facilitate the acquisition of the IEP participation strategy by the students and their parents. Generalization of the acquired strategy by the students and parents was promoted through the use of simulated IEP conference

Figure 1

STRATEGIES INTERVENTION MODEL



Kansas University Institute for Research in Learning Disabilities

proceedings designed to enhance the students and parents' use of the strategy in an actual conference setting. The IPARS strategy also addressed the students and parents' ability to identify appropriate cues for verbally contributing or providing information during the course of the conference. Thus, the IPARS strategy used in this investigation included elements of sound instructional practices including shaping, modeling, feedback, reinforcement, and generalization activities all directed toward the acquisition of the strategy by the students and their parents.

In teaching the strategy it was first presented to the students (Student Training Sessions), followed by student and parent training (Partner Training Session). A review session (Review Session) was held prior to the scheduled IEP conference.

Treatment Development and Content

Treatment development consisted of two phases. First, the IEP participation strategy was developed. Second, the procedures for teaching the strategy were developed.

The development of the IEP participation strategy was based on the premise that parents as well as students could profit from the student IEP self-advocacy strategy that had been previously developed and used to train LD adolescents to advocate for themselves at their IEP conference (Van Reusen, 1985). The modified version of the IPARS strategy focused on five behaviors or steps that were to be used by the LD adolescent and his or her parents to prepare for and actively participate in the IEP conference. Cue cards were developed to present the critical information regarding the strategy in a highlighted manner. These cue cards were standard poster

board size. These steps for the IPARS strategy are presented on the first cue card (see Figure 2).

Inventory. The first step, the "I" step, required students and their parents to assess the student's learning strengths, weaknesses to be improved, goals and interests, and preferences for classroom learning (see Figure 3). The Student/Parent IEP Self-Advocacy Inventory was developed to facilitate the inventorying process (see Appendix D). This inventory focused on three major areas for which the student and parent(s) were asked to supply information. These areas included:

1. Learning and study skills
2. Goals and interests
3. Preferences for classroom learning

In developing the training procedures for the first area, learning and study skills, the Learning & Study Skills Strengths Worksheet and the Weaknesses to Improve Worksheet were developed to assist students and parents in systematically inventorying learning strengths and weaknesses. For the Learning & Study Skill Strengths Worksheet (Figure 4) students and parents were asked to list learning strengths in the areas of reading, writing, math, test-taking and social skills. These areas were identified as being critical areas for school success in secondary settings. To assist subjects in task analyzing the skills within the areas, the trainer modeled inventorying his/her learning strengths within the area and filled out the worksheet by listing his/her strengths. While students completed the worksheet based on their strengths, parents completed the worksheet based on their son or daughter's strengths.

Figure 2

Cue Card #1

I P A R S

I— Inventory learning strengths, weaknesses, interests, and future goals.

P— Provide inventory information during the IEP conference.

A— Ask questions.

R— Respond to questions.

S— Summarize the IEP goals.

Figure 3

Cue Card #2

I P A R S

Inventory learning strengths, weaknesses, interests and future goals.

1. List learning strengths.
2. List the learning weaknesses that need improvement.
3. List interests and future goals.
4. List preferences for classroom instruction.

Figure 4

IPARS

WORKSHEET #1

LEARNING AND STUDY SKILL STRENGTHS

READING	WRITING	MATH	TEST-TAKING	SOCIAL SKILLS

Subjects used the Weaknesses to Improve Worksheet (see Figure 5) to ascertain those skills which were in need of improvement. Using this worksheet, first subjects listed the classes the students were taking. Next they listed the skills that were needed to "succeed" in that class. Finally, based on the information in this column and the information from the Learning Strengths Worksheet, they listed the weaknesses to be improved. This means of identifying weaknesses was based on the notion that many learning disabled students and their parents can readily list learning weaknesses. This is not surprising based on their handicapping condition. But subjects needed a means of selecting those weaknesses which were most important. This worksheet and the process used in completing it were designed to assist subjects in prioritizing weaknesses to improve. Similar to the Learning Strengths Worksheet, the process was modeled by the trainer.

To complete the next two sections of the inventory, goals and interests and preferences for classroom learning, cue cards were used to present the information with the trainer reading and explaining each direction or question.

To encourage a partnership to develop between the student and his/her parent(s), a short discussion period was integrated into the training after both the student and parent had completed the inventory. Students and parents were instructed to discuss their respective inventories, particularly in terms of the goals and interests each person had identified. Students and parents "negotiated the partnership" by deciding which goals were in common and which goals were unique. It was

Figure 5

WORKSHEET #2 IPARS

Weaknesses to Improve

Classes	Skills Needed for Classes	Skills to Improve or Learn

hypothesized that this procedure would assist students and parents in knowing prior to the IEP conference those goals that were most important to the other individual and would foster a supportive role between students and parents. Figure 6 presents the Negotiating the Partnership form that was developed to help individuals visualize the process.

So that all the inventoried information would be listed on one sheet of paper and so that students and parents in all three intervention conditions would take to the conference a similar-looking piece of paper, a Summary Sheet was developed. The Summary Sheet consisted of a single piece of lined yellow paper. Each student and parent in the treatment group transferred the information from their inventory onto the Summary Sheet. This Summary Sheet was then taken to the conference rather than the inventory and served as a reference for the student and his/her parent during the student's IEP conference.

Provide. The second step of the strategy, the "P" step, provided techniques for the students and parents to use when communicating their inventoried information during the conference. As listed on the Provide cue card (see Figure 7), specific content for this step of the strategy included techniques of active listening: how to use a positive and pleasant tone of voice when providing information or making statements and how to demonstrate acceptance of what is being discussed through the use of body posture, eye contact, and the use of agreement or disagreement statements.

Ask. The third step of the strategy, the "A" step, provided students and parents with information and practice activities on 'how' and 'when' to

Figure 6

Negotiating the Partnership

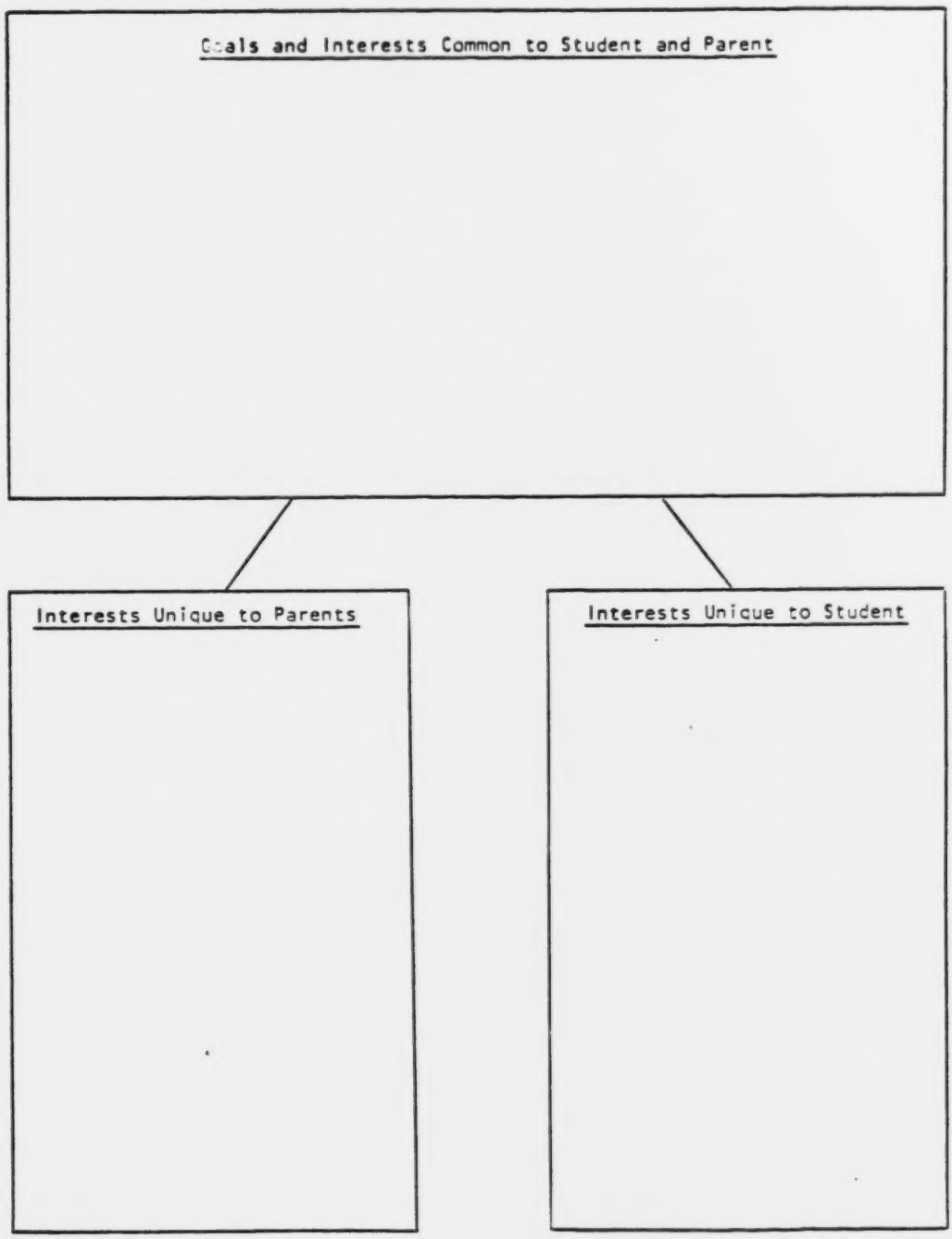


Figure 7

Cue Card #3

I P A R S

Provide inventoried information during the IEP conference.

1. Identify verbal cues (Statement and Question Cues).
2. Identify the information being shared or sought.
3. Use The IEP Summary Sheet to provide the information.

Provide inventoried information in a positive manner.

1. **Active Listening**—means listening and paraphrasing to make sure you understand what information is being shared or sought. Use head nods to show your understanding.
2. **Keep Eye Contact**—when listening to someone speak and when speaking to someone.
3. **Have a Positive and Pleasant Tone of Voice**—when providing information, asking questions, making agreement or disagreement statements.
4. **Use an Open Body Posture**—this demonstrates acceptance of what's being discussed. Sit up straight in your chair, don't slouch.
5. **Use Simple Agreement or Disagreement Statements.** "I understand", "Uh-huh!", "I see", "I agree with that, "ok" or "I see," "I'm not sure I understand", "I don't agree with that".

ask questions during the conference. The Ask cue card (Figure 8) lists the critical behaviors related to the Ask step.

Respond. The fourth step of the strategy, the "R" step, provided students and parents with techniques for effectively responding to questions asked during the conference. Figure 9 notes these techniques.

Summarize. The fifth step of the strategy, the "S" step, provided students and parents with a rationale and technique for summarizing their understanding of the IEP goals the student would work on or toward during the present and upcoming school year. The Summarize cue card is presented in Figure 10. Summarizing allowed the students, parents, and other participants at the conference to check their understanding and agreement of the goals and activities that were identified to meet the student's unique needs as a result of the conference.

In summary, the content of the IPARS strategy was used to focus on activities for preparing the LD adolescent and his or her parents to actively participate in an IEP conference. The content of this strategy emphasized organizational skills as well as social interaction and communication skills.

In addition to developing the IEP participation strategy, the procedures for teaching the strategy were also developed. The IPARS: A Student/Parent IEP Self-Advocacy Strategy Training Manual, adapted from the IPARS: A Student IEP Self-Advocacy Strategy Training Manual (Van Reusen, 1983), provided specific procedures on how to teach the strategy. The Student/Parent Strategy Training Manual was divided into seven sections representing seven acquisition and generalization steps based on

Figure 8

Cue Card #4

I P A R S

Ask questions when you want to know something about the program.

1. Ask questions if you need information or clarification.
2. Use WHAT, WHICH, WHY, WHO, WHEN, or HOW openings to preface your questions.
3. Always ask a FULL question.
4. Ask questions in a polite manner, use a pleasant tone of voice.
5. Keep eye contact with the person you are questioning.
6. Let the person answer your question before you ask another.

Figure 9

Cue Card #5

I P A R S

Respond to questions.

1. Listen carefully to what's being discussed.
2. Check your understanding of what's being asked.
3. Use your summary sheet as a reference in providing a response.
4. Provide your response in a full statement. Avoid one word responses.
5. If you don't have a comment or response to a question, say "I don't know", or "I really haven't given it much thought".
6. Keep eye contact with the person who asked the question when responding.

Figure 10

Cue Card #6

I P A R S

Summarize your IEP goals.

Before the conference ends, paraphrase or restate in your own words, your understanding of the goals that will be worked on for the next year.

the Instruction component of the Strategies Intervention model. Format for the manual was:

Training Orientation

Acquisition Steps

Step 1: Describe

Step 2: Model and Train

Step 3: Verbal Rehearsal and Review

Step 4: Conference Overview and Skill Practice

Step 5: Feedback

Step 6: Final Review

Generalization

Step 7: Conference Participation-Strategy Generalization

Each section of the manual contained a description of the purpose, materials, trainer instructions (including a script to be used during the training sessions) evaluation procedures, and mastery level. (A copy of the manual is available from the researchers upon request.)

Treatment Structure and Format

The structure and format for the treatment intervention involved three types of sessions: Student Training Sessions, a Partner (parent and student) Training Session, and a Review Session. Student training sessions were completed first. Student training consisted of training groups of 3 to 6 students during three training sessions held on consecutive days. The training sessions occurred during regular school hours and lasted 50 minutes each. These sessions were held in the school at which the student attended.

Student Training Sessions. During the student training sessions the trainer used the acquisition and generalization steps and procedures described in the Student/Parent Strategy Training Manual. For the first part of the training, Training Orientation, the trainer described the purpose and goals of the training, described the content and format of the training, and described the activities of the training. The trainer also described the scope of the research study. The concepts of strategy and IEP conference were explained. This first part of the training took approximately 10 minutes.

The second part of the training consisted of completing the Describe step of the strategy acquisition. In this step the trainer further defined the IEP process, briefly described the major behaviors in which the students will engage to complete the IPARS strategy, and provided a rationale for each step in the strategy. This step took approximately 10 minutes.

In the third part of the training, the Model and Train acquisition step was completed. In this part, first the trainer explained and modeled how to complete each part of the Student/Parent IEP Self-Advocacy Inventory. This included identifying learning strengths and weaknesses by using the Learning and Study Skills Strengths and Weaknesses to be Improved worksheets (Figures 4 and 5) as well as identifying goals and interests and preferences for classroom learning. Once the students completed their inventories, the trainer modeled each of the other steps in the strategy (PARS) and elicited good and bad examples of the behavior. Mastery was measured by the students completing their inventories and naming the steps

in the IPARS strategy and the behaviors associated with each step. One and one-half to two class periods were required to complete this part of the training.

The fourth part of the training consisted of the students participating in the next acquisition step, Verbal Rehearsal and Review. Using rapid-fire review the trainer asked the students first as a group and then individually to name the steps in the IPARS strategy and the behaviors associated with each step. Mastery was checked by asking each student in the group to recall from memory the steps and behaviors. This part generally took approximately 15 minutes.

During the fifth part of the training students were given a brief overview of the content of the IEP conference and then were asked to respond to questions and statements in a simulated conference. Information cards (see Figures 11-15) were used in presenting the IEP conference overview. During the simulated conference students participated in the next two acquisition steps, Skill Practice and Feedback. The trainer asked students to individually respond to questions and statements that might be asked during an IEP conference, for example:

1. (Student's name), the purpose of our conference today is to decide on appropriate learning goals. Do you have any questions?
2. (Student's name), what do you want to accomplish or work on this year?
3. (Student's name) is not completing his/her English assignments.
4. (Student's name), describe how you think you best learn in the classroom.

Figure 11

Information Card One

What Happens at an IEP Conference?

At the beginning of the conference:

—Everyone at the conference is introduced to one another. The conference leader (usually an administrator or teacher) will inform parents of the role of each person attending the conference.

—Next the conference leader will state the purpose of the conference.

—Then the conference leader will review the parent's legal rights.

Figure 12

Information Card Two

Discussion on Test Results

—The teacher or conference leader will describe the tests that are given and share the results or test scores with the group. Parents are usually given a written copy of the test results for their records.

—The classroom or learning implications for the student (what the test scores suggest) are discussed.

—The student's specific learning problem(s) is/are described.

—Parents and the student (when appropriate) are given the chance to ask questions and state their agreement or disagreement about the test results.

Figure 13

Information Card Three

Developing IEP Goals

—Parents and the student are asked to describe what they think are the skills or learning areas most important for the student.

—When agreement is found on what skills or learning areas are most important for the student, IEP goal statements are written.

—A goal statement is a statement of what the student is to be like when the student successfully completes a learning experience.

—How and what will be used to measure the student's goal and objective progress will also be written.

Figure 14

Information Card Four

Deciding Where Any Special Training or Special Services Will Take Place

—The conference leader will discuss the different options that are available for providing special training, instruction, or services.

—Parents and the student should state their opinions about where they think the student could best achieve the written IEP goals.

—When agreement is met on where the student will receive the special training, instruction, or service, it is written in the student's IEP.

Figure 15

Information Card Five

Conclusion of the IEP Conference

—The teacher or conference leader will summarize the IEP. Parents will receive a written copy.

—The responsibility of the teacher, parents and the student will be discussed.

—A date is set for reviewing the students IEP on at least a yearly basis.

After a student responded to the question or statement, feedback was provided by the trainer and by other students in the group. Each student was asked 3 to 5 questions. This part of the training took 15 to 20 minutes.

In total, the student training took three 50-minute class periods on three consecutive days.

Partner Training Session. The partner training session was structured to include trained students and their parent(s). The partner training consisted of one session lasting approximately 2 hours. This session was held using a group format with 1 to 4 families participating.

The session was held in the evening at one of the two high schools. During the partner session, the IPARS strategy was presented with an emphasis on facilitating student recall of the steps and to develop parent awareness of the overall strategy. First, the parents completed the "I" step of the strategy by completing the Student/Parent Inventory. Once parents had completed the inventory, both parents and students took the information from their respective inventories and copied it onto their Summary Sheets. Next, each student and his/her parent "negotiated the partnership" by determining which goals were held in common and which goals were unique to the student or the parent. Then, the trainer presented the remaining steps in the strategy. Next, the trainer provided an overview of the purpose and procedures of an IEP conference. The cue cards (Figures 2, 3, 7-10) and the information cards (Figures 11-15) were incorporated into the training. Finally, both the parents and students participated in a simulated conference in which they responded to questions and statements

and were provided feedback concerning their responses. Mastery was not formally assessed in this session.

Review Session. A review session was held for each student and his or her parent(s) immediately preceding the student's scheduled IEP conference. This review session was held to facilitate strategy generalization. It was conducted by the project staff scheduled to observe and tape record the conference and lasted 5 to 10 minutes. This session included a brief review of the IPARS steps, gave the parents and students time to review their summary sheets, and gave the student an opportunity to respond to 5 simulated conference questions.

Staff Training in Treatment Procedures

Prior to the implementation of the treatment with the subjects, all project staff members underwent training and practice in teaching the IPARS strategy using the acquisition and generalization steps and procedures provided in the Student/Parent Strategy Training Manual. To train the staff, first the researcher who had developed the original Student Strategy Training Manual presented the entire training procedures to the other project staff with the staff serving as participants. Next, the researcher modelled each part of the training. After modelling, each project staff practiced presenting that part of the training. Based on project staff performance, two project staff members were chosen to serve as trainers, with one staff member serving as an alternate. This procedure helped to ensure greater consistency across training groups.

Using simulated training sessions, the three trainers practiced the treatment intervention until they were consistent in their presentation. A

pilot session was then held with three families during which time the trainers presented the treatment intervention. Feedback was obtained from the participating families and an observer from the project staff.

Contrast Intervention

The intervention used with LD adolescents and their parents assigned to the contrast intervention group consisted of a discussion/lecture presentation over the purpose and procedures of an IEP conference.

The contrast intervention, including a training manual, was developed by the project staff. The IEP information cards used in treatment intervention were used in the contrast training (see Figures 11-15). In addition, yellow paper was provided to the parents and students to serve as Summary Sheets.

Contrast Content

The purpose of the contrast intervention was to provide the students and their parents with an orientation and specific information on the nature of IEP conference activities. The specific content of the contrast intervention included:

1. Purpose of the IEP conference
2. Parental legal rights
3. Review of diagnostic test results
4. Test implications
5. Identification of the student's specific learning problems
6. Development of IEP goals
7. Methods used to measure student progress towards goals
8. Placement decisions and related services decisions

9. Participant responsibilities

10. Documentation of the conference

The students and their parents in this group were not required to demonstrate their knowledge or mastery of the information presented to them. These subjects were also given an opportunity to complete a Summary Sheet.

Contrast Structure and Format

Similar to the treatment group, the structure of the contrast group training consisted of small groups of 1 to 4 students and their parents. The contrast training consisted of one session lasting from 60 to 90 minutes and held in the evenings. In the contrast training, first the participants were oriented to the purpose of the research project. Next, a 20-minute lecture was presented regarding the purpose and procedures of the IEP conference. Then, a question and answer period was held with participants free to ask any questions concerning the IEP conference. Finally, participants were given the Summary Sheet and asked to write the following major headings on the sheet: learning strengths, weaknesses to improve, goals and interests, and preference for classroom learning. Participants were then instructed to complete the sheet listing any information that they perceived would be helpful to share during the IEP conference.

A review session was also conducted with the students and their parents for approximately 10 minutes immediately preceding the IEP conference. During the review session, the project staff member assigned to attend the IEP conference reviewed the information discussed during the contrast

training sesson and answered any further questions. The participants were also given time to review their Summary Sheets.

Staff Training in Contrast Procedures

The project staff who conducted the treatment intervention also conducted the contrast intervention. Once the trainers and the alternate were selected, they were given the Contrast Training Manual to learn. The researcher who had developed the IPARS strategy then presented the contrast training with the project staff serving as participants. Next, each part of the training was modeled by this researcher and then the other trainers practiced that part of the training. Finally, the trainers used simulated training sessions to practice the contrast intervention until they were consistent in their presentation.

Control Intervention

The LD adolescents and their parent(s) assigned to the control group did not receive any presentation of information or training on the purpose and procedures of the IEP process apart from what was typically presented by school personnel. However, each control group student and his/her parent(s) met with a project staff member for approximately 10 minutes prior to their IEP conferences and were asked to write down on a yellow piece of paper any questions or concerns they wanted to share during the IEP conference and any goals the student should work on during the next few months or next year.

Dependent Measurement Procedures and Instrumentation

To determine the effectiveness of the various interventions on student and parent IEP conference participation, four types of dependent measures

were collected: (a) quantity of student and parent goals identified on the Summary Sheets, (b) quantity and quality of student and parent verbal contributions during the IEP conference, (c) participation evaluations measuring the performance of the student by the participants at the conference and self-evaluations of performance by the students and parents, and (d) conference length.

Procedures for Collecting the Dependent Measures

One dependent measure was collected during intervention to ascertain the students and parents' ability to identify goals on their Summary Sheets. During intervention the students and parents in each group were asked to identify goals to work on and to write those goals on the Summary Sheet. While the treatment group members systematically inventoried their learning strengths and weaknesses to help identify goals, the contrast group subjects were asked to list goals along with learning strengths, weaknesses, and choices for learning after listening to an overview of the IEP process. The control group members were told to list any information including goals that they wanted to share at the conference. The number of goals listed on the Summary Sheet served as a dependent measure in that it measured the subjects' ability to identify goals prior to the conference.

The other dependent measures were collected during the IEP conference. Teachers participating in the project were instructed to conduct the IEP conference using their "typical" procedures except the teachers were required to ask the student and his/her parent(s) a set of probe questions designed to help develop an individual education program for a secondary student who has been identified as learning disabled. A list of the probe

questions are presented in Figure 16 and the probe questions and the procedures for the IEP conference are presented in Appendix E.

The probe questions procedures directed the teacher to ask the questions after the initial conference proceedings had taken place. After asking each question, the teacher was to write down the essence of the response. If the student or parent did not respond to the question or if the response was unclear, the teacher was to restate the question. If the response was still unclear or the student or parent did not respond, the teacher was to ask the next question.

To collect the quantity and quality of student and parent verbal contributions during the IEP conference, one of the project staff observed each IEP conference and audio recorded the entire conference. This project staff member met with the student and parents and conducted either the review session for the treatment and contrast training or conducted the control intervention. Once this session was completed the school personnel participating in the IEP conference joined the group. The project staff member explained that he/she would be audio-taping the conference and discussed the confidentiality of the tape. The staff member also explained that he/she would not in any way participate in the conference, and that immediately following the conference the participants would be asked to evaluate the conference. The staff member provided the conference leader, the special education teacher, with a set of the probe questions.

The entire IEP conference was audio-taped. The staff member sat, removed from the conference members, and operated the tape recorder. The staff member also monitored the administration of the probe questions to

Figure 16

STUDENT & PARENT PROBE QUESTIONS

Student Probe Questions

1. (Student's Name), what do you think are your strongest study or learning skills?
2. Can you tell me what you think are your weakest study or learning skills?
3. What skills do you want to improve or learn over this next few months that will help you do better in school, or get along better with other people?
4. Can you tell me about any activities or materials that teachers have shared with you in the past that have helped you learn your school subjects?
5. Are there any after school activities in which you want to become involved such as (i.e., sports, jobs, clubs, etc.)?
6. Many students at your age have begun to think about careers or jobs they might like after they finish high school. Upon graduating from school, what kind of job or career would you like to pursue?
7. What types of study or learning activities work best for you?
8. What size learning or study group works best for you?
9. I'm sure you've taken a lot of tests during your years in school. Can you name or describe the type of test items on which you do best when taking tests over materials you've learned?
10. Is there anything we've overlooked or something you'd like to say about school, or any other area you are concerned about?

Parent Probe Questions

1. (Parent's Name), what do you see as (Student's Name) strongest study or learning skills?
2. What do you see as (Student's Name) weakest study or learning skills?
3. What skills would you like to see (Student's Name) improve or learn over the next few months?
4. (Parent's Name), is there anything we've overlooked or something else you'd like to say about your son's/daughter's learning needs or career interests?
5. Is there any other area you are concerned about?

ensure that all questions were asked during the conference. The staff member reminded the teacher to ask a question if one was not asked.

Immediately following the conference the staff member directed the participants to complete the participation evaluation forms. Three different evaluation scales were developed and used. Each scale used statement stems that made a comment about a behavior or perception. A five-point Likert scale ranging from "strongly disagree" to "strongly agree" were used to measure the person's agreement with the statement stem. The Participant Evaluation Scale (Figure 17) was completed by each conference participant except the student. This scale asked participants to measure the student's performance during the conference. The Student Evaluation Scale (Figure 18) was completed by the student so that a self-evaluation measure could be obtained. The Parent Evaluation Scale (Figure 19) was completed by the parent so that a self-evaluation of parent performance could be obtained. In sum, all participants evaluated the student's performance including a self-evaluation completed by the student. Only the parent evaluated his/her own performance.

Conference length was collected by the project staff member and checked by the secretary who transcribed the tapes. Conference length was measured in minutes.

Student and Parent Identified Goals

To obtain the number of goals students and parents identified on their Summary Sheets each Summary Sheet was analyzed independently by two project staff members. For the treatment and contrast groups the number of goals listed under the category Goals and Interests were counted. For the

Figure 17

PARTICIPANT EVALUATION SCALE

Student: _____ Date: _____

Check which role applies to your participation in the above named student's IEP conference.

Counselor _____ Administrator _____ Other _____

LD Teacher _____ Psychologist _____

For each question, circle the letter that best describes your opinion about the above named student's participation in the IEP conference. (SA = Strongly Agree, A = Agree, U = Undecided, D = Disagree, SD = Strongly Disagree).

1.	The student's presence at this conference was beneficial.	SA	A	U	D	SD
2.	The student appeared to understand the purpose of this conference.	SA	A	U	D	SD
3.	The student was able to respond to IEP related questions.	SA	A	U	D	SD
4.	The student asked IEP relevant questions.	SA	A	U	D	SD
5.	The student was asked appropriate questions during the IEP conference.	SA	A	U	D	SD
6.	The student was encouraged to participate during the conference.	SA	A	U	D	SD
7.	The student appeared prepared to participate in the conference.	SA	A	U	D	SD
8.	The student's contributions had impact on the IEP goals and instructional activities developed for the students at this IEP conference.	SA	A	U	D	SD
9.	The student's contributions led to the development of at least some of the student's IEP goals and objectives.	SA	A	U	D	SD

10. Check which types of information you believe the student contributed to this conference.

Information regarding preferences for taking tests _____	Information regarding learning or study skill strengths _____	Information regarding learning or study skill weaknesses _____
Information describing past effective learning activities or aids _____	Information regarding present learning goals or interests _____	Information regarding future goals or interests _____
Information regarding preferences for receiving instruction _____	IEP goal agreement statements _____	Information regarding skills the student wants to learn _____

Figure 18

STUDENT EVALUATION SCALE

Name _____ Date_____

For each statement circle the letter that best describes your opinion about the conference you just attended. (SD = Strongly Disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly Agree) Your responses will help us improve the Learning Center program.

1. I understand why this IEP conference was held.	SD	D	U	A	SA
2. I knew what was going happen at the conference.	SD	D	U	A	SA
3. I think it was important that I attended the conference.	SD	D	U	A	SA
4. I felt prepared to participate in the conference.	SD	D	U	A	SA
5. I felt free to ask questions during the conference.	SD	D	U	A	SA
6. I was given opportunities to answer questions during the conference.	SD	D	U	A	SA
7. My parents and teachers listened to what I said during the conference.	SD	D	U	A	SA
8. I was able to tell my parents and teachers what learning skills or schoolwork I need to improve this year.	SD	D	U	A	SA
9. I feel that I helped develop some of the learning or training goals that were written for me at this conference.	SD	D	U	A	SA
10. I'm satisfied with the learning goals developed for me at this conference.	SD	D	U	A	SA
11. I think the goals developed at the conference will help me with school.	SD	D	U	A	SA
12. I think the goals developed at the conference will help me to have success after I finish school.	SD	D	U	A	SA
13. I feel I know what my learning goals are this year.	SD	D	U	A	SA
14. I feel I understand what my Learning problems are.	SD	D	U	A	SA

15. One last thing. I would improve the IEP conference by:_____

_____

_____

Figure 19
PARENT EVALUATION SCALE

NAME: _____ DATE: _____

For each statement, circle the letter that best describes your opinion about the conference you just attended. (SD = Strongly Disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly Agree) Your responses will help us improve the Learning Center program.

1.	I understand why this IEP conference was held.	SD	D	U	A	SA
2.	I knew what was going to happen at the conference.	SD	D	U	A	SA
3.	I think it was important that I attended the conference.	SD	D	U	A	SA
4.	I felt prepared to participate in the conference.	SD	D	U	A	SA
5.	I felt free to ask questions during the conference.	SD	D	U	A	SA
6.	I was given opportunities to answer questions during the conference.	SD	D	U	A	SA
7.	The school personnel listened to what I said during the conference.	SD	D	U	A	SA
8.	I was able to tell the school personnel what learning skills or behaviors I think my son/daughter needs to improve this year.	SD	D	U	A	SA
9.	I feel that I helped develop some of the learning or training goals that were written for my son/daughter at this conference.	SD	D	U	A	SA
10.	I'm satisfied with the learning goals developed for my son/daughter at this conference.	SD	D	U	A	SA
11.	I think the goals developed at the conference will help my son/daughter with school.	SD	D	U	A	SA
12.	I think the goals developed at the conference will help my son/daughter to have success after he/she finishes high school.	SD	D	U	A	SA
13.	I feel I know what my son's/daughter's learning goals are this year.	SD	D	U	A	SA
14.	I feel I understand what my son's/daughter's learning problems are.	SD	D	U	A	SA

15. One last thing. I would improve the IEP conferencey by: _____

_____

control group all information on the Summary Sheet was analyzed and any piece of information that could be interpreted as a goal was listed. Reliability, based on the number of agreements divided by the number of agreements plus disagreements, was .94.

Student and Parent Verbal Contributions

To obtain a written record of the student and parent verbal contributions made during the IEP conferences, each audiotape was transcribed and the transcription was verified by the project staff member who had attended the conference. These written transcriptions along with the audiotapes were used when scoring the data for verbal contributions.

Both the student and parent verbal contributions were scored using the same systems. Two verbal contribution scoring systems were used. One system was based on the notion that contributions could either be rated as positive or negative. This system was not particularly sensitive to the dynamic, interactive nature of the communication process that takes place during the conference. This system, referred to as the positive/negative contribution scoring system, was not used in the final anaylses. Therefore, it is described only briefly in this report. Because of this concern, the researchers developed a second system based on referential communication and allowing for the interval scoring of each verbal contribution based on the specificity of the information. Since this second system, the referential communication scoring system, was used in the final analyses, it is described in detail.

Positive/Negative Contributiion Scoring System

This scoring system allowed the scorer to score a piece of information contained within a verbal contribution for informational category and type of contribution (positive or negative). The informational categories were based on the content of the probe questions asked during the conference (see Figure 16). Using the informational categories represented in the probe questions, the researchers listened to tapes of the IEP conferences and modified and adapted these initial categories accordingly. The resulting eleven informational categories are listed across the top of the scoring sheet presented in Figure 20. The positive/negative scoring system was based on the notion that each piece of information contained in a response, statement, or question could be rated as either positive or negative. A positive contribution was interpreted as contributing information to the conference. A negative contribution was interpreted as non-contributing information. For example, Clyde was asked, "Clyde, what do you think are your weakest study skills?" and he responded, "I don't write very well, and I need help with my spelling." This contribution contained two pieces of information both rated as positive since the student identified two learning weaknesses. An example of a student's negative or non-contributing response would be when Angela responded "I don't know," to the same question.

Using this system each piece of information in each student or parent verbal contribution was scored for category and as a positive or negative contribution on the Verbal Contributions Scoring sheet (Figue 16). Before the transcriptions were scored project staff were trained in the scoring system. When the three scorers reached a reliability rate of .80 they

Figure 20

Positive/Negative Contribution Scoring System

Verbal Contribution Score Sheet

STUDENT: _____ AGE: _____ DATE: _____ LENGTH OF CONFERENCE: _____ RECORDER: _____

PERSONS ATTENDING: Mother Father LD Teacher Administrator Counselor Other

Type of Info Provided by Student Interval/ Frequency Count 1 min.	Clarifies Test Performance	Identifies Learning/ Study Skill Strengths	Identifies Learning/ Study Skill Weaknesses	Identifies Present Learning Goals/ Interests	Identifies Future Learning Goals/ Interests	Identifies Helpful Learning Study Aids/ Materials	Identifies Preferences for Getting Instruction	IEP Goal Agreement Statements	Student Initiated Questions that Don't Supply Info in Other Categories	Student Statement/ Responses that Don't Supply Relevant IEP Information	
	1	2	3	4	5	6	7	8	9	10	11
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

began scoring the transcriptions. To determine scoring reliability 20% of the transcriptions were randomly selected and scored by a second scorer. Reliability based on the number of agreements divided by the number of agreements plus disagreements was .82.

Although this system allowed for scoring the data with regards to informational categories, the dichotomous scoring of the data as positive or negative was superficial. For example, when David responded, "In reading I need to work on understanding what I read," his response was scored as one positive piece of information in the "identifies learning/study skill weaknesses category." In comparison Brandi was given the same score when she responded, "I could work on reading." These two responses represent qualitatively different levels of information, yet the scoring system was not sensitive to these kinds of differences. Also the question asked (referent) was not taken into consideration. For example, if the question to David had been, "What skills do you want to improve in reading?" then his specific response is qualitatively different than if he were asked, "What skills do you want to improve in school?" Based on these weaknesses, a second scoring system was developed and used in the data analyses.

Referential Communication Scoring System

This scoring system was designed to better measure the quantity and quality of information contained within student and parent verbal contribuitons made during the IEP conference. In this system a unit of information was defined as an idea or thought spoken by the student or parent which may be contained in a word, phrase, sentence fragment, independent or dependent clause, or sentence. Since the information

contributed by the student and parent took place within a communicative context (the IEP conference) in which people discuss various topics, it was assumed that interactions during the conference represented referential communication. Referential communication referred to verbal-vocal interactions between two or more persons which focus on topics or referents. A referent was simply the topic or subject being discussed.

To analyze information the student or parent contributed during the IEP conference, the scoring process divided the referential communication of the conference into increasingly smaller units of analysis. These units were:

1) the interaction episodes during the conference in which the parent or student spoke,
2) the student or parent referential contributions within each interaction episode, and
3) the units of information contained within each contribution. It was these units of information that were scored for type of information and specificity level.

Interaction episode. An interaction episode consisted of an initiator (any conference member) introducing a referent which was followed by a relevant verbal reaction or response by the responder (any other conference member). It could also contain verbal mediational actions (i.e., the responder asks for an explanation of clarification of the referent). An interaction episode could contain any number of interactions on the same topic or referent. For example:

Teacher initiates: "Kim, what do you think are your learning strengths?"

Kim responds: "What do you mean by learning strengths?"

Teacher says: "Learning strengths are the things you do well in school."

Kim says: "Like in English and stuff?"

Teacher says: "Yes, what skills can you successfully use in English?"

Kim responds: "I don't know."

In this example the interaction episode was not completed until Kim said, "I don't know" a relevant response.

Referential contribution. Within each interaction episode were referential contributions. A referential contribution was a word, phrase, sentence fragment, dependent or independent clause, or sentence made by the student or parent on the topic being discussed. In some instances the contributions could be made in response to interactions that have already established the referent or those initiated by the student.

Unit of information. Each student or parent referential contribution was further broken down into units of information. Each piece of information was scored for two different aspects. The first was the informational category. The scorer was required to categorize each unit of information according to one of nine referent categories generally discussed during the IEP conferences. The number of referent categories was reduced to nine in this scoring system because further analysis of the conference tapes revealed that several of the categories in the previous

system were not mutually exclusive. Therefore, several categories were combined and reconceptualized. The nine informational categories were:

1. Identifies learning strengths
2. Identifies learning weaknesses
3. Identifies goals to improve or learn now
4. Identifies choices for learning
5. Identifies future goals or careers
6. Clarifies test performance
7. Statement/Question about IEP
8. Statement/Question about school
9. Other

The scorer also scored each unit of information according to specificity level. This specificity level replaced the dichotomous positive/negative scoring found in the original scoring system. Using a three-point specificity level each unit of information in the contribution was scored on an interval scale of:

2 = contribution contains specific information

1 = contribution contains general information

0 = contribution contains inappropriate information

When scoring a unit of information for specificity level, the information was considered in relation to the referent.

To score the units of information provided by the student or by the parent during the conference, the Student and Parent Contributions Scoring sheet was used (Figure 21). The scorer scored the student and the parent's verbal interactions separately, using a separate scoring sheet for each.

Figure 21

Partner Project

Page: _____

Referential Communication Scoring System

STUDENT AND PARENT CONTRIBUTIONS SCORING SHEET

Specificity Level:
2 = specific information
1 = general information
0 = inappropriate information

STUDENT/PARENT: _____ PROJECT YEAR: _____ DATE: _____ LENGTH OF CONFERENCE: _____ SCORER: _____

REFERENT CATEGORY/SPECIFICITY LEVEL

Probe Questions	Interaction Episodes	1 IDENTIFIES LEARNING STRENGTHS			2 IDENTIFIES LEARNING WEAKNESSES			3 IDENTIFIES GOALS TO IMPROVE OR LEARN NOW			4 IDENTIFIES CHOICES FOR LEARNING			5 IDENTIFIES FUTURE GOALS OR CAREERS			6 CLARIFIES TEST PERFORM			7 STMT/QUES ABOUT IEP			8 STMT/QUES ABOUT SCHOOL			9 OTHER		
Specificity		2	1	0	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0
	1																											
	2																											
	3																											
	4																											
	5																											
	6																											
	7																											
	8																											
	9																											
	10																											
TOTALS: Probe Ques																												
Conference																												

In the scoring process the scorer first listened to the tape while reading the transcript. The scorer listened to each interaction episode before scoring it.

Scoring process. To score the units of information within an interaction episode, the scorer first bracketed and numbered the interaction episode on the transcription and recorded that number on the scoring sheet. If the interaction contained a probe question, the number of the probe question was recorded in the Probe Question column.

Each referential contribution was read, listened to and noted on the transcript. The referent or topic was determined for the unit of information. The scorer then determined in which one of the nine informational categories the referent belonged as well as the level of specificity for the referent. Based on this information the specificity level for the unit of information was determined. The score for the unit of information was then recorded on the scoring sheet by placing a tally mark in the category represented by the referent and the unit of information and the specificity level represented by the unit of information. Figure 22 presents the scoring for the following interaction episode.

Teacher initates: "What do you see as your learning or study skill strengths?"

Kim responds: "Well in reading, I know my vowels, and I know the sounds, short and long, but I don't know the consonants. I know prefixes and suffixes and when I just read a story, I can put down the order of the story."

Figure 22

Sample Scoring of Interaction Episode

STUDENT: Kim PROJECT YEAR: 1984-85

Probe Question	Interaction Episodes	1 IDENTIFIES LEARNING STRENGTHS			2 IDENTIFIES LEARNING WEAKNESSES			3 IDENTIFIES GOALS TO IMPROVE OR LEARN NOW			4 IDENTIFIES CHOICES FOR LEARNING		
		2	1	0	2	1	0	2	1	0	2	1	0
1	1	1 IIII	/		/								

Computing total scores. Once the entire conference had been scored, two types of total scores were computed:

1. Probe question total scores in each category
2. Conference total scores in each category

The probe question total scores represent the total scores in each category for the interaction episodes that contained a probe question. The conference total scores represent the total scores in each category for the interaction episodes that did not contain a probe question. These scores were used in analyzing the students' IEP contributions.

Scorer training. To ensure that the two scorers were reliably using the scoring system the following training procedures were utilized. First, the two scorers read the Verbal Contribution Scoring Manual developed by the two principal reseachers. Second, the two scorers scored one conference transcription together discussing the system and further clarifying decision rules. Third, the two scorers scored one conference transcription using an informed independent technique. Using this technique the two scorers independently scored the first two interaction episodes, then discussed their results clarifying points of disagreemnent. Then they scored three interaction episodes independently and discussed their results. They continued this process of scoring and discussing three interaction episodes at a time until the entire transcription had been scored. Finally, to determine if the two scorers were reliable, they scored a third transcription independently. Criterion for successful training was set at .85, measuring reliability by the number of agreements

divided by the number of agreements plus disagreements. The two scorers obtained a .86 reliability for training, so they proceeded to score the remaining transcriptions.

Reliability. To determine if the transcriptions were reliably scored by the two trained scorers, five conferences were randomly selectd and independently scored by the two scorers. Both the parent(s) and student verbal contributions were scored. Reliability for these thirteen contribution scorings was .87.

Student and Parent Conference Participation Evaluation Scales

To obtain additional measures of student and parent performance during the IEP conference, evaluation scales were completed by participants immediately following the IEP conferences. Students' performance was rated by the student, his/her parents, and the other participants at the conference. Parents' performance was evaluated using a self-evaluation rating scale.

For the students' performance, the parents and other participants in the conference evaluated the students' performance by completing the Participant Evaluation Scale (Figure 17) immediately following the conference. This instrument consisted of nine items which contained a statement stem commenting on the student's behavior or the conference followed by a five-point Likert scale with ratings from "strongly disagree" to "strongly agree." The evaluator was asked to rate each of the nine items. The final item asked the evaluator to note (with a check) the types of information the evaluator thought the student contributed. Students rated their own performance using the Student Evaluation Scale (Figure 18).

This scale contained 14 items with a statement stem and a five-point Likert scale. These items assessed not only the students' perception concerning their own performance but also their perceptions about the conference in general and their freedom to communicate during the conference. To control for reading level the questions were originally composed and then rewritten to lower the reading level. Upon request, the questions were also read to the student.

For the parents' performance, the parents rated their own performance using the Parent Evaluation Scale (Figure 19). This scale is parallel to the Student Evaluation Scale using 14 Likert-scale rating items.

For each scale the person's ratings for the Likert-type items were summed to obtain a total evaluation score. For the student three types of rating scores were obtained: (a) student self-evaluation score, (b) parent evaluation score, and (c) other participant evaluation score. For the parent a parent self-evaluation score was obtained. Each rating scale was scored twice by two independent scorers. Reliability was computed at .99.

Conference Length

The length of the conference was also measured. One concern of teachers and administrators has been that having students more actively involved in the conferences would result in the conferences taking longer to conduct. To measure the length of conferences, each conference was timed by the staff member observing the conference. To verify conference length, the tape recording of the conference was also timed. Conference length was computed in minutes.

Date Analysis

The data were analyzed to answer the research questions as posited on pages 11-12 of this report. Several additional analyses were conducted to address control issues relevant to the study.

Control Variables

The study was designed to deal with such control variables as verbal IQ, amount of teacher prompting during the conference, and elapsed time between the end of intervention and the collection of the dependent measures. However, in conducting the study these three variables did arise as control issues.

Verbal IQ

Theoretically, student performance on the dependent measures, particularly those measuring verbal contributions seemed related to verbal IQ. To control for this variable students were randomly assigned to intervention groups. To determine if the randomization process had in fact controlled for this variable, the students' most recent verbal IQ standard scores were collected from the records. The means, standard deviations, and ranges for each group on verbal IQ is reported in Table 2 (p. 18-19). A one-way analysis of variance (ANOVA) for group indicated that randomization was not a sufficient means of controlling verbal IQ ($F(2.29) = 3.321$, $p < .05$). Post hoc comparisons using Tukey's Honestly Significant Difference (HSD) test (Tukey, 1953) revealed that the control group scored significantly higher than the treatment group on this variable. To help deal with this control problem, verbal IQ was used as a covariate for the analyses concerned with students' performance during the IEP conference.

Teacher Prompts

The number of teacher prompts given to the students during the conference could also affect the students' performance. If students are repeatedly asked to respond to questions and make comments then their verbal performance should also increase. To control for this variable teachers were instructed to limit the number of prompts that they gave to students when asking the probe questions. These procedures are presented on pages 50-51 and in Appendix E. Even though teachers were given these specific directions, an informal purusal of the transcriptions indicated that teachers may have been differentially prompting students. To determine if this was the case and if there were differences between the three intervention groups for the number of teacher prompts given to the students, each transcription was scored for the number of teacher prompts given for each probe question. A prompt was defined as any repetition, restatement, or clarification of a probe question as well as any encouragement given to the student to provide initial or additional information.

Using a one-way ANOVA the total number of teacher prompts given to students was analyzed to determine if significant differences existed among the three groups. The means and standard deviations by group are reported in Table 3. The results indicated that there were significant differences among the groups (F (2,29) = 4.059, $p < .03$). Post hoc comparisons using Tukey's HSD indicated that control group students were prompted significantly more than the treatment group students ($p < .05$).

To control for this variable within the statistical design, the number of teacher prompts was entered into the research design as a covariate for the question addressing the number of verbal contributions made when the probe questions were being asked.

The number of teacher prompts given to parents was also scored and computed (Table 3). Overall, fewer teacher prompts were given to parents as compared to students with no differences found among the three groups of parents.

Elapsed Time

In the design of the study the dependent measures were to be collected within three weeks after the completion of intervention. However, school district scheduling of the IEP conferences made it impossible for this parameter to be met. Consequently, the elapsed time was computed for students in the treatment and contrast intervention groups (see Table 3). The elapsed time represents the number of days between the end of intervention and the IEP conference. This elapsed time was not computed for the control group because they received their intervention immediately preceding the IEP conference. The results of a one-way ANOVA indicated that the elapsed time for the treatment group was significantly greater than the elapsed time for the contrast group (F (2,29) = 9.09, $p < .003$). The amount of elapsed time for the treatment group ranged from 1 to 156 days with only 3 students falling within the three week limit specified by the study. The effects this amount of elapsed time had on student and parent performance during the IEP conference can not be measured. However, other research with learning disabled students indicates these students

Table 3

Means and Standard Deviations for
Teacher Prompts and Elapsed Time

Variable	Treatment n=11	Contrast n=10	Control n=11
Teacher Prompts to Students	10.455 (5.126)	12.300 (6.019)	18.455 (8.847)
Teacher Prompts to Parents	1.000 (1.483)	2.400 (3.307)	1.182 (1.601)
Elapsed Time	59.636 (44.809)	23.500 (14.864)	--

have difficulty maintaining new skills without periodic review. This would suggest that the confounding elapsed time variable may have weakened the performance of the two groups.

Research Questions

Using the information from the above analyses the data were analyzed to address the nine research questions listed on pages .

The first research question asked if there were differences among the three groups on the number of goals identified by students as recorded on the student Summary Sheets. The total number of goals identified served as the dependent variable for this one-way ANOVA with group serving as the dependent variable.

The second research question asked the same question only in relation to the parents. The same analysis procedures were used.

To address the third research question concerning students' verbal contributions during the time the teacher asked the probe questions, one-way analyses of covariance (ANCOVAs) were conducted for each of the nine informational categories to determine if there were significant differences among the three intervention groups. In these analyses the students' verbal IQ and number of teacher prompts served as covariates.

To address the fourth research question concerning the students' verbal contributions during the rest of the conference, one-way ANOCOVAs were computed for the nine informational categories. In these analyses only the students' verbal IQ served as a covariate. Number of teacher prompts were not used as a covariate because they were not directly measured during this part of the conference.

To address the fifth and sixth research questions concerning the parents' verbal contributions during the probe questions and during the rest of the conference, one-way ANOVAs were computed for the nine informational categories.

For the seventh research question concerning the differences among the three groups on the evaluation of the student participation, a one-way MANCOVA was computed. In this analysis the independent variable was group, the covariate was verbal IQ, and the three dependent variables were the total ratings from three different evaluation sources: the students' self-evaluation, the parents' evaluations of the student, and the other participants' evaluations of the student.

The eighth research question addressed the differences among the three groups on the parents' self-evaluation. A one-way ANOVA was computed with group serving as the independent variable, and the total rating on the parents' self-evaluation scale serving as the dependent variable.

The ninth research question asked if there was a significant difference among the three groups for the length of the conference. A one-way ANOVA was used to ascertain if differences existed.

In all cases the critical alpha level was set at .05. If the main effect for group was significant, post hoc comparisons were used to ascertain differences between the individual groups.

With regard to the verbal contribution data, the question arose whether or not the nine informational categories should have been analyzed individually, using ANCOVAs and ANOVAs as suggested by questions one to four. If the informational categories were mutually exclusive then support

could be made for computing nine individual analyses. If the informational categories were not mutually exclusive then the "better" analyses would have been MANOVAs or MANCOVAs with each one of the nine categories serving as a dependent variable. Theoretically, a case can be made for the mutual exclusiveness of the nine categories. In the first scoring system developed by the reseachers there were eleven categories. This number was reduced to nine to help strengthen the mutual exclusiveness of the categories. Furthermore, because a subject provides information in one category does not imply that he/she will provide information in another category. For example, identifying learning strengths does not necessarily imply that learning weaknesses will be identified; identifying learning weaknesses does not necessarily imply that the subject will identify goals to improve or learn. Statistically, a case for computing separate analyses is demonstrated by the varying correlations among the nine categories across the four types of verbal contributions data with most correlations relatively low. Table 4 presents the intercorrelation matrices for the nine categories based on the four types of verbal contribution data: student verbal contributions during probe questions, student verbal contributions during rest of conference, parent verbal contribution during probe questions, and parent verbal contribution during rest of conference.

RESULTS

Overall the results of this research indicated the IPARS self-advocacy training was more effective than either an IEP orientation or no training in facilitating LD students and their parents' ability to identify student goals. Performance during the IEP conference indicated that when students

Table 4

Intercorrelation Matrices for Student and Parent Verbal Contributions by Informational Categories

Student Verbal Contributions During Probe Questions

Categories	1	2	3	4	5	6	7	8	9
1		.73*	.67*	.50*	.80*	.011	.15	-.13	-
2			.78*	.54*	.64*	.12	.32	-.16	-
3				.39*	.50*	-.01	.22	-.17	-
4					.62*	-.02	.79*	-.07	-
5						.17	.22	-.22	-
6							-.03	-.04	-
7								-.07	-
8									
9									

*p < .05

Student Verbal Contributions During Rest of Conference

Categories	1	2	3	4	5	6	7	8	9
1		.57*	.52*	-	-.08	-.02	-.01	.14	.07
2			.86*	-	.03	-.14	-.08	.03	.56*
3				-	-.02	-.09	-.04	.02	.28
4					-	-	-	-	-
5						-.01	-.02	.23	.30
6							.19	-.11	-.19
7								.08	-.09
8									.09
9									

*p < .05

Table 4 (continued)

Parent Verbal Contributions During Probe Questions

Categories	1	2	3	4	5	6	7	8	9
1		.30	.48*	-.15	.43*	-	-	-.11	.07
2			.13	.16	.37*	-	-	.21	-.15
3				-.26	.38*	-	-	-.11	-.14
4					-.12	-	-	-.16	-.04
5						-	-	.00	-.04
6							-	-	-
7								-	-
8									.24
9									

*p < .05

Parent Verbal Contributions During Rest of Conference

Categories	1	2	3	4	5	6	7	8	9
1		.84*	.20	.21	-.06	-.10	-.05	.00	.57*
2			.14	.16	-.08	-.14	-.09	.10	.45*
3				.00	-.08	.04	-.00	.12	.03
4					.51*	-.13	-.08	.37*	.06
5						-.12	-.12	.35*	.34
6							.58*	-.15	-.23
7								.01	-.10
8									.16
9									

*p < .05

were asked probe questions, students who had received the IPARS self-advocacy training were more successful than the students who had received the IEP orientation in contributing learning strengths and weaknesses to improve. The same trend was also evident for the students' contributions concerning future goals or careers. Significant differences were not found for any of the other informational categories, nor were any differences evident among the groups when the students were not being asked the probe questions. Results for the parents indicated there were no significant differences for the parents on the amount of verbal contributions made either during probe questioning or during the rest of the conference. Evaluations of the students' performance during the IEP conference by the students, the parents, and other participants indicated there were not perceived differences among the three training groups. The same finding was evident for parents when they completed a self evaluation. Finally, average conference length for the three groups was relatively equal with the means by group ranging from 23.6 minutes to 26.9 minutes.

IEP Conference Scenario

To provide a context for interpreting the results from the study, this section characterizes the IEP conferences observed during this study. The project staff who observed the conference met after the completion of data collection to develop a typical IEP conference scenario.

The IEP conferences observed during this study were held, for the most part, in private conference rooms or available classrooms with the participants seated around a table. The participants at the conferences generally included a parent, a learning disabilities resource teacher, and

the learning disabled student. Conferences were held at a time convenient for the parents, usually either before or after school. The content of the IEP conference varied. After initial introductions, sometimes the learning disabilities resource teacher who was conducting the conference would begin with a summary of the student's current test results, and then proceed with the administration of the probe questions designed for the study. At other conferences the teacher began with the probe questions, not discussing test results. For other conferences, the discussion initially focused on scheduling and graduation requirements with the probe questions administered later. In almost all conferences class scheduling and graduation requirements were discussed. The conferences ended with the signing of the IEP document.

While the conferences were held for the specific purpose of developing the student's individualized education program and subsequent IEP document, the learning disabilities teacher generally did not provide student work samples or documented test protocols. Beyond the administration of the probe questions, the conference discussions usually focused on class scheduling, graduation requirements, and issues addressing specific teachers, grades, and assignments.

The IEP documents presented during the observed conferences were typically pre-written and were modified only occasionally at the conference. The IEP goals pre-written on the document primarily focused on global areas (i.e., reading, writing, math, or behavior). In addition, expected levels of student performance, types of materials and activities to be used, and anticipated time-lines were minimally discussed.

Following most of the observed conferences, the parents assigned to the treatment and contrast groups indicated they found the training procedures very helpful in preparing them for their IEP conferences. It is interesting to note that regardless of group placement, most parents commented that the student's attendance at the conference was beneficial. The learning disabilities teachers involved in the study also verbally indicated approval of the use of the probe questions, often pointing out that the questions had elicited more helpful information than other formats previously used. The teachers involved in the study expressed a willingness to include students in a similar fashion during future conferences.

Student Goals

The first question investigated the differences among the three groups for the number of goals students identified on the Summary Sheets during training. This measure served to indicate if the training was effective at the time of intervention in assisting students in identifying goals for which they could work on or toward. The means and standard deviations for the three groups are reported in Table 5. Results of the ANOVA indicated there were significant diferences among the three groups for the number of goals identified (F (2,29) = 31.830, $p > .001$). Post hoc comparisons (Tukey, 1953) revealed the treatment group identified significantly more goals than either the contrast or control groups, ($p > .01$ and .05, respectively). The contrast group identified significantly more goals than the control group ($p > .01$).

Table 5

Means and Standard Deviations for Number of Goals Identified on Summary Sheets

Person Identifying Goals	Treatment	Contrast	Control
Student	4.909	2.889	.20
	(1.868)	(1.167)	(.632)
Parent	4.727	2.100	.273
	(2.533)	(1.101)	(.647)

Parent Goals

The second research question addressed the same qeustion in relation to parent goals. The means and standard deviations for the three groups are also reported in Table 5. Results of the ANOVA indicated significant differences among the three groups (F (2,29) = 20.166, $p > .001$). Post hoc comparison (Tukey, 1953) revealed the treatment group identified significantly more goals than either the contrast or control groups ($p > .01$). The contrast group also identified more goals than the control group ($p > .05$).

Student Verbal Contributions

The third question investigated the differences among the three groups for the students' verbal contributions made during the time the teacher asked the probe questions. It was hypothesized that this would be the time during which students provided the most information since questions were being addressed directly to them and the information obtained during these questions should be important for developing an IEP. The adjusted means and standard deviations for the nine informational categories are presented in Table 6. Results of ANCOVAs in which verbal IQ and teacher prompts served as covariates indicated there were significant differences among the three groups for the amount of learning strengths (F (2,27) = 4.742, $p < .02$) and learning weaknesses (F (2,27) = 3.366, $p > 05$) contributed by the students. No other analyses were significant although the "identifies future goals and career" category approached significant (F (2,27) = 3.020, $p < .06$). Post hoc (Tukey) comparisons indicated that the treatment group identified more learning strengths ($p < .05$) and more weaknesses to improve ($p < .05$) than the contrast group. Table 7 presents

Table 6

Adjusted Means and Standard Deviations for the
Student Verbal Contributions During Probe Questions

Informational Category	Treatment	Contrast	Control
Identifies Learning Strengths	11.524 (5.629)	3.813 (2.025)	7.037 (8.559)
Identifies Learning Weaknesses	8.664 (6.164)	3.691 (2.171)	5.136 (3.673)
Identifies Goals to Improve or Learn Now	5.818 (5.520)	3.120 (2.211)	3.699 (2.809)
Identifies Choices for Learning	25.810 (18.591)	17.854 (3.561)	15.818 (11.238)
Identifies Future Goals or Careers	14.501 (4.588)	8.720 (3.143)	9.770 (8.870)
Clarifies Test Performance	.273 (.905)	0	0
Student Stmt/Ques About IEP	.636 (2.11)	0	0
Student Stmt/Ques About School	.601 (1.128)	7.291 (18.780)	4.718 (4.225)
Other	0	0	0

Table 7

Summary Tables for Informational Categories with Significant Covariates for the Student Verbal Contributions During Probe Questions

Identifies Learning Strengths

Sources of Variation	DF	Mean Square	F-Value	Sig of F
Covariates	2	104.417	3.248	.054
VIQ	1	137.789	4.286	.048
Teacher Prompts	1	26.860	.836	.369
Group	2	152.453	4.742	.017
Error	27	32.147		

Identifies Future Goals or Careers

Sources of Variation	DF	Mean Square	F-Value	Sig of F
Covariates	2	118.825	3.939	.032
VIQ	1	32.812	1.088	.306
Teacher Prompts	1	153.657	5.093	.032
Group	2	91.237	3.024	.065
Error	27	30.170		

the summary tables for the informational categories with significant covariates. These tables reveal that verbal IQ was significantly related to the students' verbal contribution performance for the learning strengths category, while number of teacher prompts was significantly related to students' verbal contribution performance for the future goals category. The covariates were not significant for any other analyses.

The fourth question addressed students' verbal contributions made during the rest of the conference. It was anticipated that students would contribute less information during this portion of the conference since the teacher would not necesarily be directing either questions or attention toward the student. Table 8 presents the adjusted means and standard deviations for the nine informational categories. ANCOVAs were not conducted for those categories in which one or more groups did not contribute information (Categories 1, 2, 3, 4, and 9). For these categories means rather than adjusted means are reported. Overall the results indicated students did contribute less information during this portion of the conference, and there were no significant differences between the three intervention groups. Table 9 presents the summary tables for the informational categories in which the covariate (verbal IQ) was significant. Verbal IQ was significantly related to the amount of information contributed by the student concerning the IEP and school.

Parent Verbal Contributions

The fifth and sixth questions focused on parent verbal contributions made during the IEP conference. Results from the analyses of the parent verbal contribution data indicated that regardless of whether or not probe

Table 8

Adjusted Means and Standard Deviations for the
Student Verbal Contributions During Rest of Conference

Information Category	Treatment	Contrast	Control
Identifies Learning Strengths	0	.300 (.949)	.727 (1.272)
Identifies Learning Weaknesses	0	2.600 (7.199)	1.363 (2.803)
Identifies Goals to Improve or Learn Now	0	1.100 (2.514)	.091 (.302)
Identifies Choices for Learning	0	0	0
Identifies Future Goals or Careers	1.776 (3.467)	.321 (.675)	1.838 (3.390)
Clarifies Test Performance	.938 (1.949)	.573 (1.265)	.544 (1.036)
Student Stmt/Ques About IEP	6.541 (14.629)	1.184 (1.270)	-.498 (3.552)
Student Stmt/Ques About School	28.416 (17.923)	25.881 (22.031)	31.576 (38.158)
Other	0	1.200 (2.230)	1.545 (3.476)

Table 9

Summary Tables for Informational Categories with
Significant Covariates for the Student Verbal Contributions
During Rest of Conference

Student Statements/Questions About IEP

Sources of Variation	DF	Mean Square	F-Value	Sig of F
Covariate	1	372.157	5.460	.027
Group	2	128.579	1.886	.170
Error	28	68.162		

Student Statements/Questions About School

Sources of Variation	DF	Mean Square	F-Value	Sig of F
Covariate-VIQ	1	4143.370	6.446	.017
Group	2	75.907	.118	.889
Error	28	642.758		

questions were being asked, there were no significant differences among the three groups for the verbal contributions on any of the nine categories. Table 10 presents the means and standard deviations for the verbal contributions made during the probe questions while Table 11 presents the same results for the verbal contributions made during the rest of the conference. Across both portions of the conference parents contributed the most information about school-related information. This included such topics as class scheduling, graduation requirements, discussion of specific teachers, grades and assignments.

Student Evaluations

The seventh question asked if differences were evident in the evaluations of the students' performance during the conference when verbal IQ was taken into account. In this analysis the covariate was not significant. Results from the student evaluation scales completed by the students, parents, and other participants immediately following the IEP conference, indicated no significant differences among the three groups. Table 12 presents the adjusted means and standard deviations for the three total evaluation scores. Across all three scores for the three groups, the ratings were relatively high. The most frequently given rating was "agrees" (4).

Parent Evaluations

The eighth question addressed the self-evaluations completed by the parents. Similar results were evident for this scale with no significant differences found among the three groups. Table 13 presents the means and standard deviations for the parents' total evaluation scores.

Table 10

Means and Standard Deviations for Parent Verbal Contributions During Probe Questions

Informational Categories	Treatment	Contrast	Control
Identifies Learning Strengths	6.181 (2.136)	5.700 (3.773)	4.000 (2.569)
Identifies Learning Weaknesses	5.273 (3.823)	6.600 (3.565)	4.091 (4.230)
Identifies Goals to Improve or Learn Now	6.455 (3.446)	5.400 (4.858)	4.364 (2.420)
Identifies Choices for Learning	.636 (2.111)	.200 (.633)	0
Identifies Future Goals or Careers	7.636 (10.385)	5.700 (5.618)	7.636 (10.519)
Clarifies Test Performance	0	0	0
Student Stmt/Ques About IEP	0	0	0
Student Stmt/Ques About School	6.091 (6.090)	8.500 (7.044)	7.364 (8.152)
Other	0	.100 (.316)	1.182 (3.920)

Table 11

Means and Standard Deviations for Parent Verbal Contributions During Rest of Conference

Informational Categories	Treatment	Contrast	Control
Identifies Learning Strengths	.091 (.302)	1.000 (3.162)	0
Identifies Learning Weaknesses	0	1.100 (3.143)	.636 (1.804)
Identifies Goals to Improve or Learn Now	0	.600 (1.265)	0
Identifies Choices for Learning	.364 (1.206	.100 .316	0
Identifies Future Goals or Careers	.909 (2.700)	.200 (.633)	1.273 (3.901)
Clarifies Test Performance	1.182 (1.779)	1.800 (2.821)	.546 (1.293)
Student Stmt/Ques About IEP	3.000 (7.071)	2.500 (5.083)	3.363 (9.542)
Student Stmt/Ques About School	26.091 (23.142)	25.500 (14.782)	22.555 (19.806)
Other	.273 (.647)	3.500 (5.212)	2.273 (4.650)

Table 12

Adjusted Means and Standard Deviations for
Total Rating Scores on Student Evaluation Scales

Evaluation Scales	Treatment	Contrast	Control
Student Self-Evaluation	56.517 (4.447)	59.489 (5.425)	51.766 (12.877)
Parent Evaluation	37.924 (4.551)	36.862 (4.276)	32.934 (5.871)
Other Participant Evaluation	37.836 (4.668)	35.475 (2.696)	33.244 (5.298)

Table 13

Means and Standard Deviations for Total Rating Score
on Parent Self-Evaluation Scale

Evaluation Scales	Treatment	Contrast	Control
Parent Self-Evaluation	58.636 (9.320)	61.600 (5.338)	59.727 (4.384)

Length of Conference

The ninth question asked if differences in conference length existed among the groups. Results indicated that there were no differences among the groups with the average conference length for all conferences being 25.28 minutes. Table 14 presents the means and standard deviations for conference length by group.

DISCUSSION

The results of this study indicated that when high school learning disabled students and their parents were given a strategy for systematically inventorying the students' learning strengths, weaknesses, goals and interests, and choices for learning, they are able to generate more goals to share at the IEP conference than if not given the strategy. The purpose of the first step in the IPARS strategy was to provide students and their parents with a systematic means of preparing for the conference. Previous research has indicated that parents make relatively few contributions during the conference (Goldstein et al., 1980) and that they feel somewhat overwhelmed by the IEP conference (McKinney & Hocutt, 1982; Vaughn et al., 1986). It appears that this strategy did provide students and their parents with a means of identifying goals that they could share at the conference. On the Summary Sheets students and parents in the strategy trained group generated, on the average, 5 goals along with other relevant information they wanted to share during the conference. Given the intent of the IEP conference (i.e., to develop a student's individual educational program by generating annual goals and short term objectives),

Table 14

Means and Standard Deviations for Conference Length

	Treatment	Contrast	Control
Mean	23.600	26.920	25.473
SD	(10.510)	(8.919)	(12.078)

identifying an average of 5 goals could be interpreted as a substantial amount of relevant information.

Based on feedback from the parents during the study and a pilot study, the Inventory step seems particularly important for students. In the original grant it was proposed that parents and students would be trained together in one 3 to 4 hour session. Using this procedure in a pilot study with five students and their parents both students and their parents participated in the in-depth training provided during the Student Training Sessions. Feedback from that pilot study indicated that parents did not perceive the need for such in-depth training on their part but did perceive it as quite important for their sons or daughters. Several reasons may be related to this perception. First, students in the study and pilot study had been in special education placements for an average of seven years. This meant that parents had been participating in IEP conferences for a number of years by the time they joined our project. Numerous parents suggested that this strategy would have been very helpful to them when their son or daughter first entered special education, but that by now they were comfortable with the system. In contrast, they felt that the strategy training was "time well spent" for their son or daughter. Well over half of the students in the pilot and main studies had never participated in an IEP conference. Second, parents in the pilot study perceived student's input in educational decision-making as critical, and that these high school aged adolescents should be assuming more responsibility for their own educations. PL 94-192 suggests that older students should actively participate in this role. Intensive parent involvement may be most salient

when LD students are in early grades, with the students assuming more responsibility for learning and educational decision-making as they mature.

Generalization of the strategy was measured at the IEP conferences with the major dependent variables being student and parent verbal contributions made during the conferences. Results do not indicate strong positive support for the strategy but they are promising. Strategy trained students did identify more learning strengths and weaknesses and to some extent more future goals and career interests during probe questioning than students who received only an IEP orientation when verbal IQ and teacher prompts were taken into account. However, there were no statistically significant differences among the groups for the informational categories of identifying current goals, identifying choices for learning, clarifying test performance and student statements/questions about the IEP or about school in general. No differences were evident among the three groups for the parent contributions.

These promising but not conclusive results for students may be somewhat related to control issues. Three extenuating factors may have intervened to weaken the power of the strategy. First, the elapsed time between the training and the IEP conference was not well controlled. While students and parents in the strategy group averaged 60 days between the end of training and the conference, students and parents in the orientation group averaged 24 days. Other research in strategy training has highlighted the importance of period review for maintenance and generalization (Deshler, Schumaker, & Lenz, 1984; Montegue & Bos, 1986).

A second control factor relates to the number of teacher prompts provided to students during the conference. Teachers in the study were asked to restrict the amount of prompting given to students and parents particularly during probe questioning. However, when the teacher prompt data for students were analyzed the results indicated that teachers gave almost twice as many prompts to control group students ($\bar{x}$ = 18.455) as to the treatment group ($\bar{x}$ = 10.455). In listening to the transcriptions it was evident that if students were frequently prompted they would initiate more responses as the probe questioning progressed. Although an attempt was made to control for this statistically by using it as a covariate, its effects on the conferences may not be sufficiently captured using only statistical control.

A third control factor may also have impacted the results of the study. Although students were assigned to group randomly to control for differences in student characteristics, analyses of the characteristics indicated that students in the control group scored significantly higher on verbal IQ and reading achievement than the treatment groups. Given the important role that verbal communication plays in the IEP conference, the researchers statistically controlled for this factor by using it as a covariate.

Given the difference between the treatment group and the control group on the number of teacher prompts given to students and the level of students' verbal IQ, comparisons between these two groups may be somewhat suspect. Therefore, comparisons between the two groups for which these

control were not different, the contrast and treatment groups, may be more appropriate.

In addition to these extenuating factors, a training factor may also have weakened the power of the strategy. In the study conducted by Van Reusen (1985), LD high school students were trained individually in the IPARS strategy. In the current research project students were trained in groups of three to six students with their parents. In the Van Reusen study, mastery for both recall of the strategy steps and use of the strategy behaviors during a simulated conference was required. Van Reusen required mastery of the strategy during the individual simulated conference activities. In the simulated activity the student responded to IEP-related questions and statements. The activity was tape recorded and reviewed by the student and reseacher with the researcher providing feedback to the student. The researcher also scored the student's verbal responses to determine if the student met the specified mastery criterion. If a student did not meet criterion, the student was required to participate in additional simulated conferences until criterion was met. Due to the group format and the parent involvement in the current study, mastery of the strategy behaviors was neither required nor measured for either the students or the parents. This individual mastery may have been a critical component for facilitating generalization to the IEP conference.

To test this hypothesis the researchers are currently conducting an additional study with groups of junior high LD students in which the group training model has been modified to ensure individual mastery of the behavior (Partner Project II, G#008530213). First year data from this

study indicate that the strategy is substantially more powerful when individual mastery is required. This additional study has also controlled for the extenuating factors of verbal IQ, teacher prompts, and elapsed time.

IMPLICATIONS

Clearly this research project does not result in a clear-cut recommendation for using the IPARS strategy with groups of learning disabled high school students and their parents. Although both students and parents were able to generate more goals if they received strategy training, verbal contributions during the IEP conferences did not demonstrate compelling differences between the variously trained groups. However, this and other related studies conducted by the researchers indicate that if individual mastery for the recall of the strategy steps and for the use of the strategy behaviors is incorporated into the teaching routine, then students effectively use the strategy during the IEP conference. The adaptation of the strategy training from an individual to a group format is particularly important for use in the classroom. With its relatively short training time (one class period on four consecutive days) this strategy could be incorporated into the curriculums of high school learning disabilities programs. Several of the teachers who participated in the project spoke positively of its integration into a required course entitled "Decisions" in which students focus on interpersonal, social, and communication skills and problem solving and planning as it applies to everyday situations.

This research also has implication for the format of the IEP conference. The teachers reported that the probe questions used during the IEP conference facilitated involvement, particularly student involvement. Based on this, the faculty in one high school decided to use the probe questions at all IEP conferences for incoming ninth graders during the spring.

Previous observational research has demonstrated that parents make relatively few contributions during placement/IEP conference (Strickland et al., 1980; Vaughn et al., 1986). The probe questions seemed to assist students and parents in providing information. During probe questions the treatment, contrast, and control group students contributed an average of 67.8, 44.9, and 46.18 units of information respectively when verbal IQ and teacher prompts were taken into account. In comparison they contributed on the average of 37.7, 33.2, and 37.2 units of information during the rest of the conference, indicating that the probe questions did assist in eliciting responses. Furthermore, these responses made during probe questioning for the most part were categorized in informational categories relevant to developing an IEP. During the rest of the conference the contributions tended to focus more on other school-related matters.

The same trend for the informational categories is evident in the parent contributions although differences between the amount of responding across the two periods is relatively equal. With only five probe questions being asked, parents contributed on the average of 32.3, 32.2, and 28.64 units of information across the treatment, contrast, and control groups with most contributions focusing on IEP-related categories. During the

rest of the conference they contributed an average of 31.9, 36.3 and 30.6 units of information with the major contributions related to general school issues. Providing IEP conference leaders with probe questions may assist in making students and parents equal partners in the IEP process.

Finally, this research has implications for policies related to PL 94-142. Currently the rules and regulations for PL 94-142 state that, "Generally, a handicapped child should attend the IEP meeting whenever the parent decides that it is appropriate for the child to do so" (Federal Register, 1981, p. 5467). Furthermore, it states that, "The agency must inform the parents about this provision before each IEP meeting -- as part of the 'notice of meeting' required under section 300, 345(c) that they may invite their child to participate" (Federal Register, 1981, p. 5467). However, providing an opportunity for the student and their parents to participate is different than providing the tools they need to be effective participants. Districts and school personnel need to go further than providing an opportunity for participation if the spirit of PL 94-142 is to be realized. This research suggests that providing students with a strategy or tool can positively affect their participation and assist them in taking an active role in the IEP process.

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APPENDIX A

Participation Letter & Form

1885

The University of Arizona
College of Education
Department of Special Education
Tucson, Arizona 85721
(602) 621-3214
(602) 621-3248

1985

A Proud Beginning

August 20, 1984

Dear Parents and Student:

During the 1984-85 school year the Department of Special Education at the University of Arizona in conjunction with Amphitheater Public Schools will be conducting a research project on the Individualized Educational Program (IEP) conference held each year to plan a student's special education program. This project, called the Partner Project, will focus on getting students and their parents to become actively involved at the IEP conference. You and your son/daughter are invited to participate in this project.

The project is an attempt to determine ways of preparing students and their parents as participants in planning individualized education programs. Each year, IEP conferences are held with the parents for each student enrolled in the Special Education and Support Center. Your participation in the project will entail a one time meeting, at a convenient place and time, prior to your son/daughter's regularly scheduled IEP meeting and a four-month follow-up IEP conference. At these conferences, and in your presence, a Support Teacher will ask you and your son/daughter some questions concerning his/her school needs, interests, and goals. You and your son/daughter's comments or contributions will be recorded and later evaluated for type of response. At the conclusion of each conference, you and your son/daughter will also be asked to complete a short evaluation of the conference. This information will help us evaluate ways of involving students and their parents in IEP conferences, and it will also be helpful to you and the teachers in planning your son/daughter's educational program. All information obtained will be treated as confidential.

You and your son/daughter are invited to participate in this project but your participation is strictly voluntary. If you have any further questions concerning the project, feel free to call either Tony Van Reusen or Candace Bos at 621-3248. If you agree to participate, please sign the

enclosed consent form and return it as soon as possible in the self-addressed, stamped envelope. Once it has been received a member of the Partner Project will contact you by phone.

We are looking forward to working with you and your son/daughter.

Sincerely,

Candace S. Bos, Ph.D.
Assistant Professor

Anthony Van Reusen, Ph.D.
Assistant Professor

Leila Johnson
Assistant Director of Special Education
Amphitheater Public Schools

Enclosure

Partner Project Members:

Project Directors
Candace Bos, Ph.D.
Anthony Van Reusen, Ph.D.

Research Assistants
Skip McGrogan, M.Ed.
Catherine Marshall, M.S.
Sharon Russell, M.N.

PARTNER PROJECT FOR
IEP PARTICIPATION

Informed Consent Form

If you and your son/daughter agree to participate, please sign this form and return it in the self-addressed, stamped envelope. One of the Project Members will be contacting you by phone shortly after you return the form.

I, _____ agree to my participation and the
(parent or guardian)
participation of _____ in the Partner Project for IEP
(son/daughter)
Participation Project described in the attached letter. I understand that participation is voluntary and will require our attendance at a meeting prior to the IEP conference. I also understand that approximately four months later we will participate in another IEP conference.

I consent to having information reviewed and/or copied by the Partner Project Members from my son/daughter's special education and psychological records. I also agree to having the IEP conferences audiotape recorded and observed. I understand that all information gathered will remain confidential.

I understand that I may withdraw from this project at any time.

Signatures of Participants:

Date: _____ _____
Parent or Legal Guardian

Phone: _____ _____
Parent or Legal Guardian

Address: _____ _____
Student

_____

APPENDIX B

School District Criteria for Learning Disabilities Placement

LEARNING DISABILITIES

DEFINITION

The Learning Disabilities program is a program designed for students with a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematics calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, emotional disturbance, or of environmental, cultural, or economic disadvantage. (§ 121a.5 (b) (9))

CRITERIA

To participate in the Learning Disabilities program a child must exhibit a significant discrepancy between ability and achievement, when intellectual ability, age and previous educational experience in the regular classroom are considered.

A significant discrepancy is defined as functional achievement at or below 50% (.5) of expected achievement. Functional achievement is defined as the child's instructional level in the basic skill areas. Determination of functional achievement is based on a combination of formal and informal achievement tests, criterian-referenced measures and formal and informal observation.

Modifications of existing teaching strategies and curriculum within the regular classroom setting, which have proved to be unsuccessful, must be documented.

Learning problems when primarily due to the following shall be excluded from consideration as learning disabilities:

a. The other handicapping conditions as specified in section § 125.25

b. Learning problems resulting from extended absence

c. Learning problems resulting from "Educational Disadvantage"

d. Discrepancies between ability and school achievement due to motivation

SERVICES

The district provides a continuum of services for students placed in the Learning Disabilities program. In each school, the programs range from monitoring to extended resource.

At the elementary level, a self-contained Intensive Learning Disabilities (ILD) program serves the entire district for both primary and intermediate students with severe learning disabilities.

APPENDIX C

Biographical Data Form

&

Student Information Form

ID# _____

PARTNER PROJECT
BIOGRAPHICAL FORM

To Parents:

The following information is necessary for us to complete the Partner Project. All information provided will remain confidential. Please answer all questions.

1. _____ _____ _____
   Student's Last Name First Middle

2. _____ _____ _____ _____
   Street Address City ZIP Phone #

3. Today's date: _____

4. Student's birthdate: _____ Age: _____

5. Student's sex: _____ Male _____ Female

6. Student's Ethnic background:

   _____ Black _____ Hispanic
   _____ Asian _____ Other (specify)
   _____ White _____

7. Student's primary language: _____

8. Student's school: _____ Grade level: _____

9. Number of years in Special Education: _____

10. Number of years spent in the current school district: _____

11. Marital status of student's parents:

    _____ single _____ separated
    _____ married _____ other
    _____ divorced _____
    _____ widowed

12. Name of student's father: _____

    Occupation: _____

    Gross yearly income: _____

    Educational level: _____

    Currently in student's home: _____ Yes _____ No

    Primary language _____

13. Name of student's mother: _____

Occupation: _____

Gross yearly income: _____

Educational level: _____

Currently in student's home: _____ Yes _____ No

Primary language _____

14. Names and ages of student's siblings:

(Indicate Yes or No)

_____ living in student's home _____

_____ living in student's home _____

_____ living in student's home _____

_____ living in student's home _____

_____ living in student's home _____

15. Are any of the student's siblings in Special Education placement? If so, which one(s) and what type of placement? _____

_____

16. Have you ever attended an IEP conference? _____ Yes _____ No

Has your spouse? _____ Yes _____ No

17. Is the student being served for any other handicapping condition? (specify)

_____

_____

18. Name of person filling out this form and relationship to student:

_____

19. List your preference (1,2,3) for meeting times should your assigned group require them:

_____ week night
_____ Saturday morning
_____ Saturday afternoon
_____ Sunday morning
_____ Sunday afternoon
_____ Sunday evening

ID# _____

PARTNER PROJECT
STUDENT INFORMATION FORM

Please fill out all items.

1. Name of student: _____

2. School: _____ Grade: _____

3. Type of Adaptive Education placement: _____ with

_____ consultation to regular classroom teacher
_____ resource room - number of periods per day: _____
_____ self-contained class

4. Most recent IQ score: _____ Full Scale

_____ Verbal

_____ Performance

Type of Measure: _____

Date of Exam: _____

5. Most recent Achievement(s) score:

_____ Reading

_____ WL or Spelling

_____ Math

_____ Other (specify)

Type of Measure: _____

Date of Exam: _____

6. GPA of previous year: _____

7. Primary academic concern (previous IEP): _____

_____

_____

_____

8. Date of last IEP: _____

   Persons who participated: _____

   _____

   _____

   _____

   _____

9. Number of years in Adaptive Education placement: ____

   Number of years in LD placement: _____

10. Name and title of person filling out this form:

    _____

11. Today's date: _____

---

12. Date of upcoming IEP: _____ Time: _____

13. Persons designated to attend: _____

    _____

    _____

    _____

    _____

14. Is the student being served for any other disability condition (specify):

    _____

    _____

    _____

    _____

APPENDIX D

Student/Parent IEP Self-Advocacy Inventory

STUDENT/PARENT IEP SELF-ADVOCACY INVENTORY

Name: _____ Date: _____ Age: _____

School: _____ Grade: _____ Counselor: _____

Directions: This inventory is designed to help a student and his/her parents identify and organize information about the student's educational needs and interests. Please answer all the items as completely as you can.

LEARNING AND STUDY SKILLS

(These refer to the skills you use to gather, learn and remember information, facts, or concepts.)

1. List your learning or study skill strengths.

_____

_____

_____

2. List what you feel are your weakest learning or study skills that need improvement.

_____

_____

_____

3. List two materials or activities that have helped the student learn school subjects in the past.

_____

_____

_____

GOALS AND INTERESTS

1. List the skills you would like to learn or improve this year that will help you do better in school, or get along better with other people.

_____

_____

_____

2. What is one after-school activity you would like to get involved with, such as sports, clubs or a job?

_____

_____

_____

3. After completing high school, what training, job, or career do you want to pursue?

_____

_____

_____

PREFERENCES FOR CLASSROOM LEARNING

(Circle the ways you learn best. You may circle as many as you wish.)

I learn best when I work:

a. by myself

b. individually with a teacher

c. with a tutor

d. with another student

e. other _____

Preferences for Classroom Learning (cont.)

I learn best in the following groups:

a. large groups for lectures

b. small groups from 3-6 people

c. paired learning 2-3 people

d. independent learning, on my own

e. other _____

The activities that I learn best from include:

a. reading

b. listening

c. taking notes

d. watching or viewing

e. discussion

f. writing reports

g. making oral reports

h. working math problems

i. working on lab projects

j. working on shop projects (i.e., metal, wood, machine)

k. completing study guides

l. other _____

When taking tests over material I've learned, I do best on:

a. multiple choice, true-false or matching tests

b. short answer or essay tests

c. open note or open book tests

d. take-home tests

e. oral tests

f. other _____

APPENDIX E

Probe Questions & Procedures for IEP Conference

PROBE QUESTIONS AND PROCEDURES FOR

IEP CONFERENCE

Overview: These conference probe questions have been designed to help develop an individualized education program (IEP) for a secondary student who has been identified as learning disabled. The probe questions are organized to elicit information from the student and parent during an IEP conference in three areas. These areas include: (1) the student's perceived learning strengths and weaknesses, (2) the student's learning goals and interests, and (3) the student's preferences for receiving instruction in special and regular classroom settings. This information may be helpful to you for confirming and supporting diagnostic evaluation results. More importantly, the information obtained from the probe questions can assist you in developing IEP goals which are partially based on a student's and parent's perceived learning needs and student interests (when deemed appropriate), and may result in having the student and parent more committed and motivated to attain educational goals and objectives. Student as well as parent commitment and motivation are seen as crucial components in the successful education of the LD adolescent.

DIRECTIONS FOR USING THE CONFERENCE PROBE QUESTIONS

The conference probe questions are to be asked after the initial conference proceedings have taken place. Initial conference proceedings include such events as introductions, role clarifications, discussion of the parent's legal rights, interpretation of test results and their classroom implications. The probe questions MUST be asked prior to the development of any IEP goal statements and short term objectives. Student probe questions are to be asked first followed by the parent questions.

STEP 1: Please familiarize yourself with the probe questions and these directions prior to a student's IEP conference.

STEP 2: Begin by saying to the student and parent "IN ORDER TO HELP IDENTIFY AND DEVELOP SOME GOALS AND ACTIVITIES FOR (STUDENT'S NAME) EDUCATIONAL PROGRAM, I'D LIKE TO ASK YOU SOME QUESTIONS." Proceed with student questions one through ten in order, allowing time for the student to respond to each question.

STEP 3: After asking each question, write down the essence of the student's response in the space provided under each question. If the student's response is unclear, or the student doesn't respond, restate the question preceded with some appropriate comment like, "LET ME RESTATE THE QUESTION." If the student's response is still unclear, or the student doesn't comment, place a N/C (no comment) in the space provided.

STEP 4: Proceed with parent questions one through five in order. After asking each question, write down the essence of the parent's response in the space provided under each question. If the parent's response is unclear, or the parent doesn't respond, restate the question preceded with some appropriate comment like, "LET ME RESTATE THE QUESTION." If the parent's resonse is still unclear, or the parent doesn't comment, place a N/C (no comment) in the space provided.

STEP 5: After all the questions have been asked, quickly compare, analyze and prioritize the student's and parent's comments with previously identified student strengths and weaknesses (based on your evaluation results and observation). State to the student and parent(s) what you consider to be the skills, abilities, or content area most important for the student's success in school. Ask the student and his/her parent(s) to compare their responses with your recommendations. See if there is agreement on the type and order of skills, abilities, or content to be learned by the student. If disagreement is perceived, you may need to restate the classroom demands at the secondary level, and ask the parent(s) and student to make suggestions on what they perceive is needed to help the student meet school demands as an independent learner. Through this negotiation process, a compromise should be reached.

NOTE: If neither the student nor the parent has provided you with any indication of desired learning needs, goals, or interests, solicit the parent's and student's agreement or disagreement with your recommendations.

STEP 6: When agreement is achieved, use the information obtained to formulate annual goals, including short term objectives on the school's IEP forms.

STUDENT PROBE QUESTIONS

Student: _____ **Parent/Guardian:** _____

Current Placement: _____ **Date of IEP Conference:** _____

To be asked of student:

1. (Student's Name), what do you think are your strongest study or learning skills?

2. Can you tell me what you think are your weakest study or learning skills?

3. What skills do you want to improve or learn over this next few months that will help you do better in school, or get along better with other people?

4. Can you tell me about any activities or materials that teachers have shared with you in the past that have helped you learn your school subjects?

5. Are there any after school activities in which you want to become involved such as (i.e., sports, jobs, clubs, etc.)?

6. Many students at your age have begun to think about careers or jobs they might like after they finish high school. Upon graduating from school, what kind of job or career would you like to pursue?

7. What types of study or learning activities work best for you?

8. What size learning or study group works best for you?

9. I'm sure you've taken a lot of tests during your years in school. Can you name or describe the type of test items on which you do best when taking tests over materials you've learned?

10. Is there anything we've overlooked or something you'd like to say about school, or any other area you are concerned about?

PARENT PROBE QUESTIONS

Parent/Guardian: _____

To be asked of parents:

1. (Parent's Name), what do you see as (Student's Name) strongest study or learning skills?

2. What do you see as (Student's Name) weakest study or learning skills?

3. What skills would you like to see (Student's Name) improve or learn over the next few months?

4. (Parent's Name), is there anything we've overlooked or something else you'd like to say about your son's/daughter's learning needs or career interests?

5. Is there any other area you are concerned about?